Canon

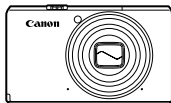
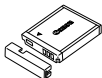
PowerShot S95

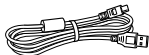
Camera User Guide

- Make sure you read this guide, including the "Safety Precautions" section, before using the camera.
- Store this guide safely so that you can use it in the future.

ENGLISH

Checking the Package Contents

Check if the following items are included in your camera package.
If anything is missing, contact the retailer from which you purchased the camera.

Camera

Battery Pack NB-6L (with Terminal Cover)

Battery Charger CB-2LY/CB-2LYE

Interface Cable IFC-400PCU

Stereo AV Cable AVC-DC400ST

Wrist Strap WS-DC9

Getting Started

DIGITAL CAMERA Solution Disk

Warranty Card

"Canon Customer Support" Leaflet

Using the PDF Manuals

Also refer to the PDF manuals on the CD-ROM. After installation, shortcut icons appear on the desktop. If the software installation fails, you can find the manuals in the Readme folder on the CD-ROM.

- **Camera User Guide (This Guide)**
  Once you have mastered the basics, use the camera's many features to shoot more challenging photos.
- **Personal Printing Guide**
  Read when you want to connect the camera to a printer (sold separately) and print.
- **Software Guide**
  Read when you want to use the included software.

- A memory card is not included.
- Adobe Reader is required to view the PDF manuals.

Read This First

Test Shots and Disclaimer

Take some initial test shots and play them back to make sure the images were recorded correctly. Please note that Canon Inc., its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including memory cards, that results in the failure of an image to be recorded or to be recorded in a way that is machine readable.

Warning Against Copyright Infringement

The images recorded with this camera are intended for personal use. Do not record images that infringe upon copyright laws without the prior permission of the copyright holder. Please be advised that in certain cases the copying of images from performances, exhibitions, or commercial properties by means of a camera or other device may contravene copyright or other legal rights even if the image was shot for personal use.

Warranty Limitations

This camera's warranty is only effective in the country of sale. If there is a problem with the camera while abroad, please return it to the country of sale before proceeding with a warranty claim to a Canon Customer Support Help Desk. For Canon Customer Support contacts, please see the customer support list supplied with your camera.

LCD Monitor (Screen)

- The LCD monitor is produced with extremely high-precision manufacturing techniques. More than 99.99% of the pixels operate to specification, but occasionally non-performing pixels may appear as bright or dark dots. This is not a malfunction and has no effect on the recorded image.
- The LCD monitor may be covered with a thin plastic film for protection against scratches during shipment. If so, remove the film before using the camera.

Camera Body Temperature

Please take care when operating the camera for an extended period as the camera body may become warm. This is not a malfunction.

What Do You Want to Do?

Shoot

View

Shoot/View Movies

Print

Save

Other

Table of Contents

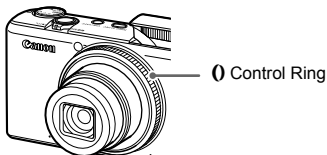
Chapters 1 – 3 explain the basic operations and frequently used functions of this camera. Chapters 4 onward explain the advanced functions, letting you learn more as you read each chapter.

4 Choosing Settings Yourself....73

5 Getting More Out of Your Camera....87

6 Using Various Functions for Shooting Movies.... 113

Conventions Used in This Guide

- Icons are used in the text to represent the camera buttons and control dial.
- Language that displays on the screen appears inside [ ] (square brackets).
- The directional buttons, control dial, FUNC./SET button and control ring are represented by the following icons.

- : Things you should be careful about
- : Troubleshooting tips
- : Hints for getting more out of your camera
- : Supplemental information
- (p. xx): Reference pages ("xx" stands for a page number)
- This guide assumes all functions are at their default settings.
- The various types of memory cards that can be used in this camera are collectively referred to as memory cards in this guide.

Safety Precautions

- Before using the product, please ensure that you read the safety precautions described below. Always ensure that the product is used correctly.
- The safety precautions noted on the following pages are intended to prevent injuries to yourself and other persons, or damage to the equipment.
- Be sure to also check the guides included with any separately sold accessories you use.

⚠ **Warning**	Denotes the possibility of serious injury or death.

- **Do not trigger the flash in close proximity to human eyes.**

Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least one meter (39 inches) away from infants when using the flash.

- **Store this equipment out of the reach of children and infants.**

Strap: Putting the strap around a child's neck could result in asphyxiation.

- **Use only recommended power sources.**
- **Do not attempt to disassemble, alter or apply heat to the product.**
- **Avoid dropping or subjecting the product to severe impacts.**
- **To avoid the risk of injury, do not touch the interior of the product if it has been dropped or otherwise damaged.**
- **Stop using the product immediately if it emits smoke, a strange smell, or otherwise behaves abnormally.**
- **Do not use organic solvents such as alcohol, benzine, or thinner to clean the equipment.**
- **Do not let the product come into contact with water (e.g. sea water) or other liquids.**
- **Do not allow liquids or foreign objects to enter the camera.**

This could result in electrical shock or fire.

If liquids or foreign objects come into contact with the camera interior, immediately turn the camera power off and remove the battery.

If the battery charger becomes wet, unplug it from the outlet and consult your camera distributor or the closest Canon Customer Support Help Desk.

- **Do not play the supplied CD-ROM(s) in any CD player that does not support data CD-ROMs.**

Playing the CD-ROM(s) in an audio CD player (music player) could damage the speakers. It is also possible to suffer hearing loss from listening with headphones to the loud sounds of a CD-ROM played on a music CD player.

- **Use only the recommended battery.**
- **Do not place the battery near or in direct flame.**
- **Unplug the power cord periodically and wipe away any dust and dirt that has collected on the plug, the exterior of the power outlet, and the surrounding area.**
- **Do not handle the power cord with wet hands.**
- **Do not use the equipment in a manner that exceeds the rated capacity of the electrical outlet or wiring accessories. Do not use if the power cord or plug are damaged, or not fully plugged into the outlet.**
- **Do not allow dirt or metal objects (such as pins or keys) to contact the terminals or plug.**

The battery may explode or leak, resulting in electrical shock or fire. This could cause injury and damage the surroundings. In the event that a battery leaks and the battery acid contacts eyes, mouth, skin or clothing, immediately flush with water.

⚠ Caution

Denotes the possibility of injury.

- **Be careful not to bang the camera or subject it to strong impacts or shocks when hanging it by the strap.**
- **Be careful not to bump or push strongly on the lens.**

This could lead to injury or damage the camera.

- **Be careful not to subject the screen to strong impacts.**

If the screen cracks, injury may result from the broken fragments.

- **When using the flash, be careful not to cover it with your fingers or clothing.**

This could result in burns or damage to the flash.

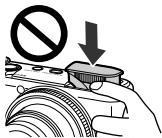
- **Avoid using, placing or storing the product in the following places.**
  - **Places subject to strong sunlight.**
  - **Places subject to temperatures above 40 °C (104 °F).**
  - **Humid or dusty areas.**

These could cause leakage, overheating or an explosion of the battery, resulting in electrical shock, fire, burns or other injuries.

High temperatures may cause deformation of the camera or battery charger casing.

- **The slideshow transition effects may cause discomfort when viewed for prolonged periods.**

- **Take care not to pinch your finger when the flash lowers.**

This could result in injury.

Caution Denotes the possibility of damage to the equipment.

- **Do not aim the camera at bright light sources (the sun, etc.).**

Doing so may damage the image sensor.

- **When using the camera on a beach or at a windy location, be careful not to allow dust or sand to enter the camera.**
- **Do not forcibly push down or pull up the flash.**

This may cause the camera to malfunction.

- **In regular use, small amounts of smoke may be emitted from the flash.**

This is due to the high intensity of the flash burning dust and foreign materials stuck to the front of the unit. Please use a cotton swab to remove dirt, dust or other foreign matter from the flash to prevent heat build-up and damage to the unit.

- **Remove and store the battery when you are not using the camera.**

If the battery is left inside the camera, damage caused by leakage may occur.

- **Before you discard the battery, cover the terminals with tape or other insulators.**

Contacting other metal materials may lead to fire or explosions.

- **Unplug the battery charger from the power outlet after charging is complete, or when you are not using it.**
- **Do not place anything, such as cloth on top of the battery charger while it is charging.**

Leaving the unit plugged in for a long period of time may cause it to overheat and distort, resulting in fire.

- **Do not place the battery near pets.**

Pets biting the battery could cause leakage, overheating or explosion, resulting in fire or damage.

- **Do not sit down with the camera in your pocket.**

Doing so may cause malfunctions or damage the screen.

- **When putting the camera in your bag, ensure that hard objects do not come into contact with the screen.**
- **Do not attach accessories to the strap.**

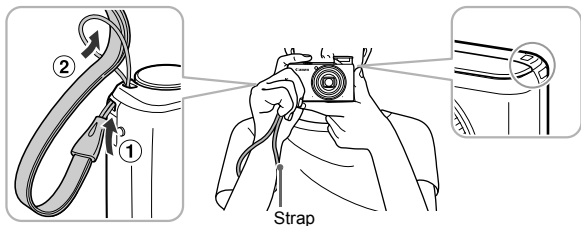
Doing so may cause malfunctions or damage the screen.

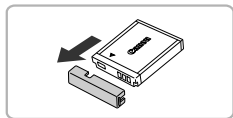
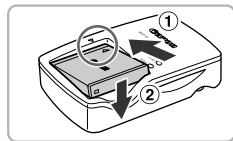
1

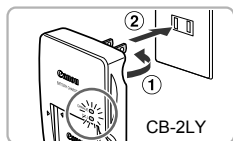
Getting Started

This chapter explains preparations before shooting, how to shoot in AUTO mode, and then how to view and erase the images you take. The latter part of this chapter explains how to shoot and view movies and transfer images to a computer.

Attaching the Strap/Holding the Camera

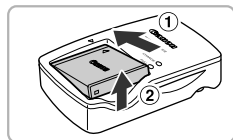
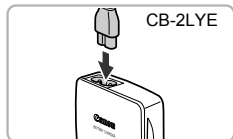
- Be sure to attach the supplied strap to the camera and wrap it around your wrist when shooting to avoid dropping the camera. The strap can also be attached to the left side of the camera.
- Keep your arms tight against your body while holding the camera firmly by the sides. Be sure that your fingers do not block the flash while it is raised.

Charging the Battery

Use the included charger to charge the battery. Be sure to charge the battery as it is not charged at the time of purchase.

1 Remove the cover.

2 Insert the battery.

- Align the ▲ marks on the battery and charger, then insert the battery by sliding it in (①) and down (②).

3 Charge the battery.

- **For CB-2LY:** Flip out the plug (①) and plug the charger into a power outlet (②).
- **For CB-2LYE:** Plug the power cord into the charger, then plug the other end into a power outlet.

▶ The charge lamp lights orange and charging starts.

▶ The charge lamp will light green when charging has finished. Charging takes approx. 1 hour and 55 minutes.

4 Remove the battery.

- Unplug the battery charger from the power outlet, then remove the battery by sliding it in (①) and up (②).

To protect the battery and prolong its life, do not charge it for longer than 24 hours continuously.

Approximate Number of Shots That Can Be Taken

Number of Shots	Approx. 200
Playback Time	Approx. 5 hrs.

- The number of shots that can be taken is based on the Camera & Imaging Products Association (CIPA) measurement standard.
- Under some shooting conditions, the number of shots that can be taken may be less than mentioned above.

Battery Charge Indicator

An icon or message will appear on the screen indicating the battery's charge state.

Display	Summary
(battery icon, full)	Sufficient charge.
(battery icon, partial)	Slightly depleted, but sufficient.
(battery icon, low) (Blinking red)	Nearly depleted. Charge the battery.
"Change the battery pack."	Depleted. Recharge the battery.

Using the battery and charger effectively

- Charge the battery on the day, or the day before, it will be used.
  Charged batteries continue to discharge naturally even if they are not used.

Attach the cover to a charged battery so that the ▲ mark is visible.

- How to store the battery for long periods:
  Deplete and remove the battery from the camera. Attach the terminal cover and store the battery. Storing a battery for long periods of time (about a year) without depleting it may shorten its life span or affect its performance.
- The battery charger can also be used when abroad.
  The charger can be used in regions that have 100 – 240 V (50/60 Hz) AC power. If the plug does not fit the outlet, use a commercially available plug adapter. Do not use electrical transformers for foreign travel as they will cause damage.
- The battery may develop a bulge.
  This is a normal characteristic of the battery and does not indicate a problem. However, if the battery bulges to the point where it will no longer fit into the camera, please contact a Canon Customer Support Help Desk.
- If the battery is quickly depleted even after charging, it has reached the end of its life span. Purchase a new battery.

Compatible Memory Cards (Sold Separately)

- SD memory cards (2 GB and less)*
- SDHC memory cards
  (more than 2 GB, up to and including 32 GB)*
- SDXC memory cards
  (more than 32 GB)*
- MultiMediaCards
- MMCplus memory cards
- HC MMCplus memory cards
- Eye-Fi Cards

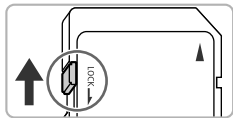
* This memory card complies with the SD standards. Some cards may not operate properly depending on the brand of card used.

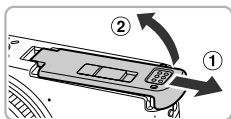
Depending on your computer's OS version, SDXC memory cards may not be recognized when using a commercially available card reader. Check to make sure that your OS supports this function beforehand.

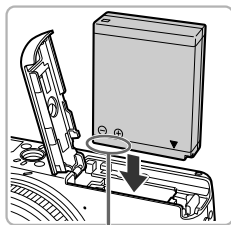
About Eye-Fi Cards

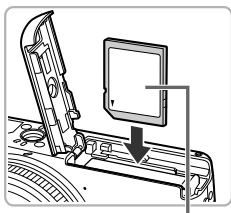
This product is not guaranteed to support Eye-Fi card functions (including wireless transfer). In case of an issue with an Eye-Fi card, please check with the card manufacturer.
Also note that an approval is required to use Eye-Fi cards in many countries or regions. Without approval, use of the card is not permitted. If it is unclear whether the card has been approved for use in the area, please check with the card manufacturer.

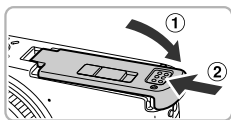
Inserting the Battery and Memory Card

Insert the included battery and a memory card (sold separately).

Check the card's write-protect tab.

- If the memory card has a write-protect tab, you will not be able to record images if the tab is in the locked position. Slide the tab up until you hear a click.

2 Open the cover.

- Slide the cover (①) and open it (②).

3 Insert the battery.

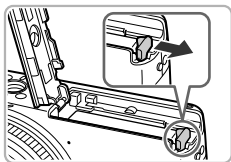
- Insert the battery as shown until it locks into place with a click.
- Be sure to insert the battery in the correct direction or it will not properly lock into place.

4 Insert the memory card.

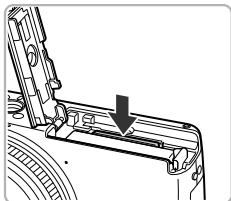
- Insert the memory card as shown until it locks into place with a click.
- Be sure the memory card is oriented correctly. Inserting the memory card in the wrong direction could damage the camera.

5 Close the cover.

- Close the cover (①), and press downward as you slide it until it clicks into place (②).

What if [Memory card locked] appears on the screen?

SD, SDHC and SDXC memory cards, and Eye-Fi cards have a write-protect tab. If this tab is in the locked position, [Memory card locked] will appear on the screen and you will not be able to take or erase images.

Removing the Battery and Memory Card

Remove the battery.

- Open the cover and press the battery lock in the direction of the arrow.
- ▶ The battery will pop up.

Remove the memory card.

- Push the memory card in until you hear a click, then slowly release it.
- ▶ The memory card will pop up.

Approximate Number of Shots per Memory Card

Memory Card	4 GB	16 GB
Number of Shots	1471	6026

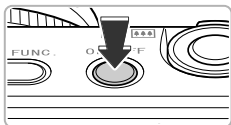
- Values are based on the default settings.
- The number of shots that can be taken will vary depending on camera settings, the subject and the memory card used.

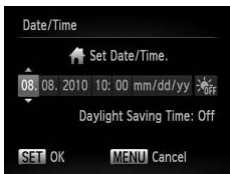
Can you check the number of shots that can be taken?

You can check the number of shots that can be taken when the camera is in a Shooting mode (p. 24).

Number of shots that can be taken

Setting the Date and Time

The Date/Time settings screen will appear the first time the camera is turned on. Since the dates and times recorded into your images are based on these settings, be sure to set them.

1 Turn on the camera.

- Press the power button.
- ▶ The Date/Time screen will appear.

2 Set the date and time.

- Press the ◀▶ buttons to choose an option.
- Press the ▲▼ buttons or turn the dial to set a value.

3 Complete the setting.

- Press the FUNC./SET button.
- ▶ Once the date and time have been set, the Date/Time screen will close.
- Pressing the power button will turn off the camera.

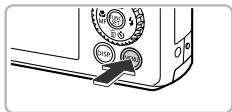
Reappearing Date/Time screen

Set the correct date and time. If you have not set the date and time, the Date/Time screen will appear each time you turn on the camera.

Daylight saving time settings

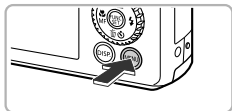
If you choose ☀OFF in Step 2 and press the ▲▼ buttons or turn the dial and choose ☀, you will set the time to daylight saving (1 hour ahead).

Changing the Date and Time

You can change the current date and time settings.

Display the menus.

- Press the MENU button.

Choose [Date/Time] in the ƒ† tab.

- Press the ◀▶ buttons to choose the ƒ† tab.
- Press the ▲▼ buttons or turn the ● dial to choose [Date/Time], then press the (FUNC./SET) button.

Change the date and time.

- Follow Steps 2 and 3 on p. 19 to adjust the setting.
- Pressing the MENU button will close the menu.

Date/Time battery

- The camera has a built-in date/time battery (backup battery) that allows the date/time settings to be retained for about three weeks after the battery pack has been removed.
- By inserting a charged battery or connecting an AC adapter kit (sold separately, p. 38) the date/time battery can be charged in about 4 hours even if the camera is not turned on.
- If the date/time battery is depleted, the [Date/Time] menu will appear when you turn the camera on. Follow the steps on p. 19 to set the date and time.

Setting the Display Language

You can change the language that displays on the screen.

1 Enter Playback mode.

- Press the ▶ button.

2 Display the settings screen.

- Press and hold the FUNC./SET button, then immediately press the MENU button.

3 Set the display language.

- Press the ▲▼◀▶ buttons or turn the dial to choose a language, then press the FUNC./SET button.
- ▶ Once the display language has been set, the settings screen will close.

What if the clock appears when the FUNC./SET button is pressed?

The clock will appear if too much time passes between pressing the FUNC./SET button and the MENU button in Step 2. If the clock appears, press the FUNC./SET button to remove the clock and repeat Step 2.

You can also change the display language by pressing the MENU button, choosing the 🔧 tab, and choosing the [Language] menu item.

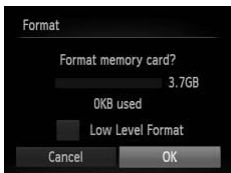
Formatting Memory Cards

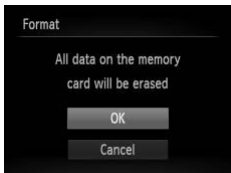
Before you use a new memory card or one that has been formatted in other devices, you should format the card with this camera.
Formatting (initializing) a memory card erases all data on the memory card. As you cannot retrieve the erased data, exercise adequate caution before formatting the memory card.
Before formatting an Eye-Fi card (p. 171), be sure to install the software contained on the card to a computer.

1 Display the menu.

- Press the MENU button.

2 Choose [Format].

- Press the ◀▶ buttons to choose the ƳŤ tab.
- Press the ▲▼ buttons or turn the ● dial to choose [Format], then press the (FUNC. SET) button.

3 Choose [OK].

- Press the ◀▶ buttons or turn the ● dial to choose [OK], then press the (FUNC. SET) button.

4 Format the memory card.

- Press the ▲▼ buttons or turn the ● dial to choose [OK], then press the (FUNC. SET) button.
- ▶ The memory card will be formatted.

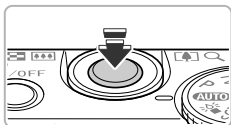
5 Complete formatting.

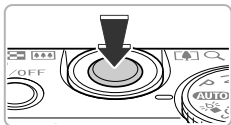
- ▶ When formatting ends, [Memory card formatting complete] will appear on the screen.
- Press the (FUNC. SET) button.

Formatting or erasing data on a memory card merely changes the file management information on the card and does not ensure its contents are completely erased. Be careful when transferring or disposing of a memory card. When disposing of a memory card, take precautions such as physically destroying the card to prevent personal information leaks.

The total capacity of the memory card displayed in the formatting screen may be less than indicated on the memory card.

Pressing the Shutter Button

To take images that are in focus, be sure to first press the shutter button lightly (halfway) to focus, then press fully to shoot.

Press halfway (Press lightly to focus).

- Press lightly until the camera beeps twice and AF frames appear where the camera focused.

2 Press fully (Press fully to shoot).

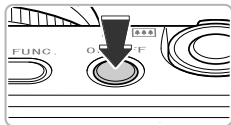
- The camera plays the shutter sound and takes the shot.
- Since the shot is being taken while the shutter sound plays, be careful not to move the camera.

Does the length of the shutter sound change?

- Since the time required to shoot differs according to the scene you want to take, the length of the shutter sound may change.
- If the camera or subject moves while the shutter sound is playing, the recorded image may be blurry.

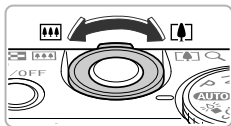
If you shoot without pressing the shutter button halfway, the image may not be in focus.

Taking Pictures (Smart Auto)

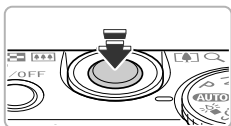
Since the camera can determine the subject and shooting conditions, you can let it automatically select the best settings for the scene and just shoot. The camera can also detect and focus on faces, setting the color and brightness to optimal levels.

Turn on the camera.

- Press the power button.
- ▶ The start-up screen will appear.

Choose AUTO mode.

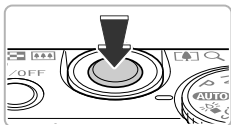
- Set the mode dial to AUTO.
- When you point the camera toward the subject, the camera will make a slight noise as it determines the scene.
- ▶ The icon for the determined scene will appear in the upper right of the screen.
- ▶ The camera will focus on detected faces and display frames on them.

3 Compose the shot.

- Moving the zoom lever toward (telephoto) will zoom in on your subject, making it appear larger. Moving the lever toward (wide angle) will zoom out from your subject, making it appear smaller. (The zoom bar showing the zoom position appears on the screen.)
- You can turn the () ring to zoom in on your subject (Step Zoom, p. 57).

Zoom bar

4 Focus.

- Press the shutter button halfway to focus.
- ▶ The flash will rise automatically in dark environments.

AF Frame

- ▶ When the camera focuses, it will beep twice and AF frames will appear where the camera focused.
  Several AF frames will appear when the camera focuses on more than one point.

5 Shoot.

- Press the shutter button fully to shoot.
- ▶ The camera will play the shutter sound and shoot. The flash will automatically fire in low light conditions if it has been raised.
- ▶ The image will appear on the screen for about two seconds.
- You can take a second picture even while an image is displayed by pressing the shutter button again.

What if an icon appears in the upper right of the screen?

The icon for the determined scene will appear in the upper right of the screen. For details on the icons that appear, see “Scene Icons” (p. 179).

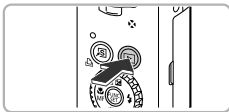
Choosing the subject to focus on (Tracking AF)

After pressing the ▲ button and displaying ⌖, point the camera so that ⌖ is on the subject you want to focus on. Press and hold the shutter button halfway to display a blue frame where focus and exposure will be maintained (Servo AF). Press the shutter button fully to shoot.

What if...

- **What if the color and brightness of the images do not turn out as expected?**
The scene icon (p. 179) that appears on the screen may not match the actual scene. If this happens, try shooting in **P** mode (p. 74).
- **What if white and gray frames appear when you point the camera toward a subject?**
When faces are detected, a white frame appears on the face of the main subject, while gray frames appear on other detected faces. The frames will follow the subjects within a certain range (p. 88).
If the main subject moves, however, the gray frames will disappear, leaving only the white frame.
- **What if a blue frame appears when you press the shutter button halfway?**
A blue frame appears when a moving subject is detected; the focus and exposure will continuously adjust (Servo AF).
- **What if the indicator blinks orange and ⚠ flashes on the screen?**
Attach the camera to a tripod so that the camera does not move and blur the image.
- **What if the camera does not play any sounds?**
Pressing the DISP. button while turning on the camera power will turn off all sounds except for warning sounds. To turn the sounds on, press the MENU button to choose [Mute] in the 🔧 tab, then press the ◀▶ buttons to choose [Off].
- **What if the image comes out dark even if the flash fired when shooting?**
The subject is too far away for the flash to reach. The effective flash range is approximately 50 cm – 6.5 m (1.6 – 21 ft.) at maximum wide angle ([W]), and approximately 90 cm – 3.0 m (3.0 – 9.8 ft.) at maximum telephoto ([T]).
- **What if the camera beeps once when the shutter button is pressed halfway?**
Your subject may be too close. Move the zoom lever toward [W] and hold it until the lens stops moving. The camera will be at its maximum wide angle setting and you will be able to focus on subjects that are about 5 cm (2.0 in.) or more away from the end of the lens. Move the zoom lever toward [T] and hold it until the lens stops moving. The camera will be at its maximum telephoto setting and you will be able to focus on subjects that are about 30 cm (12 in.) or more away from the end of the lens.
- **What if the lamp lights when the shutter button is pressed halfway?**
To reduce red-eye and to assist in focusing, the lamp may light when shooting in dark areas.
- **What if the ⚡ icon blinks when you try to shoot?**
The flash is charging. You can shoot when recharging ends.
- **"Wrong flash position. Restart the camera." appears on the screen.**
Appears if your finger is pressing on the flash when it tries to pop-up or if something else hinders the movement of the flash.

Viewing Images

You can view the images you have taken on the screen.

1 Enter Playback mode.

- Press the ▶ button.
- ▶ The last image you took will appear.

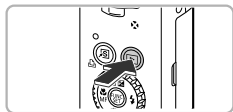
2 Choose an image.

- Pressing ◀ or turning the ● dial counter-clockwise will cycle through the images in the reverse order they were taken, from the newest image to the oldest.
- Pressing ▶ or turning the ● dial clockwise will cycle through images in the order they were taken, from oldest to newest.
- The images change more quickly if you keep the ◀▶ buttons pressed, but they will appear coarse.
- The lens will retract after approximately 1 minute elapses. If the flash has been raised, the flash will lower.
- Pressing the ▶ button again while the lens is retracted will turn off the power.

Switching to Shooting mode

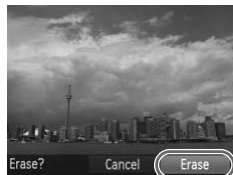
Pressing the shutter button halfway while in Playback mode switches the camera to Shooting mode.

Erasing Images

You can choose and erase images one at a time. Please note that erased images cannot be recovered. Exercise adequate caution before erasing an image.

1 Enter Playback mode.

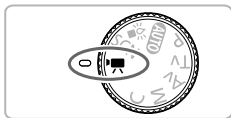
- Press the ▶ button.
- ▶ The last image you took will appear.

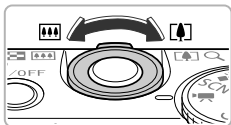
2 Choose an image to erase.

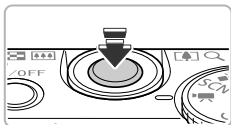
- Press the ◀▶ buttons or turn the dial to display an image to erase.

3 Erase the image.

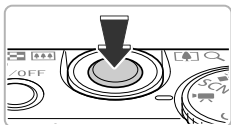
- Press the ▼ button.
- Press the ◀▶ buttons or turn the dial to choose [Erase], then press the FUNC./SET button.
- ▶ The displayed image will be erased.
- To exit instead of erasing, press the ◀▶ buttons or turn the dial to choose [Cancel], then press the FUNC./SET button.

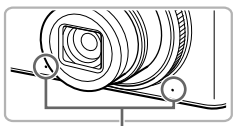
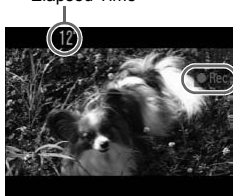
Shooting Movies

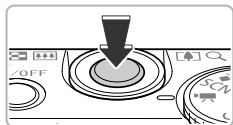
The camera can automatically select all settings so that you can shoot movies just by pressing the shutter button. The audio will record in stereo.

1 Enter 🎥 mode.

- Set the mode dial to 🎥.

2 Compose the shot.

- Moving the zoom lever toward [♠] will zoom in on your subject, making it appear larger. Moving the lever toward [♠♠♠] will zoom out from your subject, making it appear smaller.
- You can turn the () ring to zoom in on your subject (Step Zoom, p. 57).

3 Focus.

- Press the shutter button halfway to focus.
- ▶ When the camera focuses, it will beep twice.

4 Shoot.

- Press the shutter button fully.

Elapsed Time

Microphone

- Recording will start, and [● Rec] and the elapsed time will appear on the screen.
- Once shooting begins, take your finger off the shutter button.
- If you change the composition of your shot during shooting, the focus will stay the same, but the brightness and tone will automatically adjust.
- Do not touch the microphone while shooting.
- Do not press any buttons other than the shutter button while shooting. The sound the buttons make will be recorded in the movie.

5 Stop shooting.

- Fully press the shutter button fully again.
- The camera will beep once and stop shooting the movie.
- The movie will record to the memory card.
- Shooting will automatically stop when the memory card fills.

Magnifying the subject while shooting

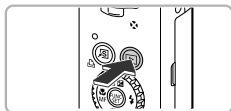
Pressing the zoom lever toward [♠] will zoom in on the subject. However, operation sounds will be recorded and the movie may appear coarse.
Also, you cannot use the () ring to zoom.

Estimated Shooting Times

Memory Card	4 GB	16 GB
Shooting Time	25 min. 8 sec.	1 hr. 42 min. 57 sec.

- Shooting times are based on default settings.
- Maximum clip length is approx. 29 min. 59 sec.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.

Viewing Movies

You can view the movies you have shot on the screen.

1 Enter Playback mode.

- Press the ▶ button.
- ▶ The last image you took will appear.
- ▶ SET 🎬 appears on movies.

2 Choose a movie.

- Press the ◀▶ buttons or turn the ● dial to choose a movie, then press the FUNC./SET button.
- ▶ The movie control panel will appear on the screen.

3 Play the movie.

- Press the ◀▶ buttons or turn the ● dial to choose ▶ (Play), then press the FUNC./SET button.
- ▶ The movie will play.
- You can pause/resume the movie by pressing the FUNC./SET button.
- Press the ▲▼ buttons to adjust the volume.
- ▶ After the movie finishes, SET 🎬 appears.

? What if you can't play back movies on a computer?

- Install the included software (p. 33).
- When watching a movie on a computer, frames may drop, it may not play smoothly, and the audio may stop suddenly depending on the computer's capabilities.
- If you use the supplied software to copy the movie back onto the memory card, you can play back the movie smoothly with the camera. For enhanced playback you can also connect the camera to a TV.

Transferring Images to a Computer for Viewing

You can use the included software to transfer images you have shot with the camera to a computer for viewing. If you are already using software included with another Canon-brand compact digital camera, install the software from the included CD-ROM, overwriting your current installation.

System Requirements

Windows

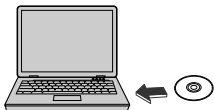
OS	Windows 7 Windows Vista Service Pack 1 and 2 Windows XP Service Pack 3
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	Pentium 1.3 GHz or higher (still images), Core2 Duo 1.66 GHz or higher (movies)
RAM	Windows 7 (64 bit): 2 GB or more Windows 7 (32 bit), Windows Vista (64 bit, 32 bit), Windows XP: 1 GB or more
Interface	USB
Free Hard Disk Space	ZoomBrowser EX: 200 MB or more CameraWindow: 150 MB or more* Digital Photo Professional: 200 MB or more PhotoStitch: 40 MB or more
Display	1,024 x 768 pixels or higher

* For Windows XP, Microsoft .NET Framework 3.0 or later (max. 500 MB) must be installed. Installation may take some time depending on your computer's capabilities.

Macintosh

OS	Mac OS X (v10.4 – v10.6)
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	PowerPC G4/G5 or Intel Processor (still images), Core Duo 1.66 GHz or higher (movies)
RAM	1 GB or more
Interface	USB
Free Hard Disk Space	ImageBrowser: 250 MB or more CameraWindow: 150 MB or more Digital Photo Professional: 200 MB or more PhotoStitch: 50 MB or more
Display	1,024 x 768 pixels or higher

Preparations

Windows Vista and Mac OS X (v10.5) are used for these explanations.

1 Install the Software.

Windows

① Place the CD in the computer's CD-ROM drive.

- Place the supplied CD-ROM (DIGITAL CAMERA Solution Disk) (p. 2) into the computer's CD-ROM drive.

② Begin installation.

- Click [Easy Installation] and follow the on-screen instructions to proceed with the installation.
- If the [User Account Control] window appears, follow the on-screen instructions to proceed.

③ When the installation finishes, click [Restart] or [Finish].

④ Remove the CD-ROM.

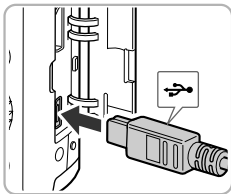
- Remove the CD-ROM when your desktop screen appears.

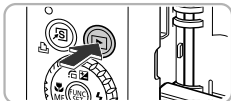
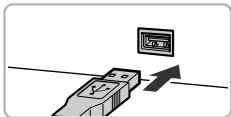
Macintosh

① Place the CD in the computer's CD-ROM drive.

- Place the supplied CD-ROM (DIGITAL CAMERA Solution Disk) (p. 2) into the computer's CD-ROM drive.

② Begin installation.

- Double-click the on the CD.
- Click [Install], and follow the on-screen instructions to proceed with the installation.

2 Connect the camera to the computer.

- Turn off the camera.
- Open the cover and insert the small plug of the included interface cable (p. 2) firmly into the camera terminal in the direction shown.
- Insert the interface cable's larger plug into the computer. For connection details, refer to the user guide provided with the computer.

3 Turn on the camera.

- Press the ▶ button to turn on the camera.

4 Open CameraWindow.

Windows

- Click [Downloads Images From Canon Camera using Canon CameraWindow].
- ▶ CameraWindow will appear.
- If CameraWindow does not appear, click the [Start] menu and choose [All Programs], followed by [Canon Utilities], [CameraWindow] and [CameraWindow].

Macintosh

- ▶ CameraWindow will appear when you establish a connection between the camera and computer.
- If CameraWindow does not appear, click the CameraWindow icon on the Dock (the bar which appears at the bottom of the desktop).

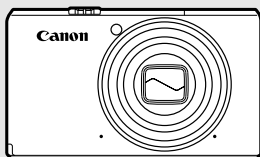
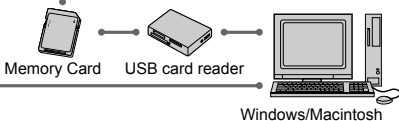
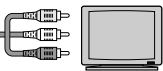
For Windows 7, use the following steps to display CameraWindow.
① Click on the task bar.
② In the screen that appears, click the link to modify the program.
③ Choose [Downloads Images From Canon Camera using Canon CameraWindow] and click [OK].
④ Double click .

Transfer and View Images

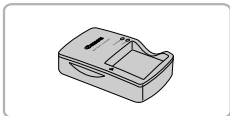
- Click [Import Images from Camera], and then click [Import Untransferred Images].
- ▶ All images not previously transferred will transfer to the computer. Transferred images will be sorted by date and saved in separate folders in the Pictures folder.
- When [Image import complete.] appears, click [OK], then click [X] to close CameraWindow.
- Turn off the camera and unplug the cable.
- For details on how to view images using a computer, refer to the *Software Guide*.

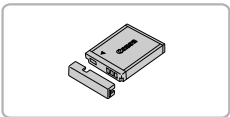
You can transfer images even without using the image transfer function in the included software by simply connecting your camera to a computer. There are, however, the following limitations.

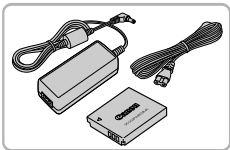
- It may take a few minutes from when you connect the camera to the computer until you can transfer images.
- Images shot in the vertical orientation may be transferred in the horizontal orientation.
- RAW images, or JPEG images recorded at the same time as RAW images, may not transfer.
- Protection settings for images may be lost when transferred to a computer.
- There may be problems transferring images or image information correctly depending on the version of the operating system in use, the file size, or the software in use.
- Some functions in the included software may not be available, such as editing movies, and transferring images to the camera.

Accessories

Separately Sold Accessories

The following camera accessories are sold separately. Some accessories are not sold in some regions, or may no longer be available.

Power Supplies

Battery Charger CB-2LY/CB-2LYE

- An adapter for charging Battery Pack NB-6L.

Battery Pack NB-6L

- Rechargeable lithium-ion battery.

AC Adapter Kit ACK-DC40

- This kit lets you power the camera using household power. Recommended for powering the camera for an extended period of time or when connecting to a computer or printer. Cannot be used to charge the camera battery.

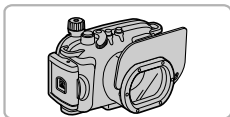
Using Accessories Abroad

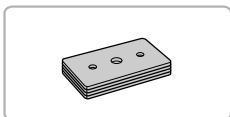
The battery charger and the AC adapter kit can be used in regions that have 100 – 240 V (50/60 Hz) AC power.
If the plug does not fit the outlet, use a commercially available plug adapter. Do not use electrical transformers for foreign travel as they will cause damage.

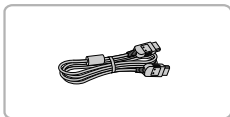
Flash

High-Power Flash HF-DC1

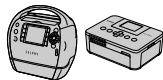
- This externally mounted flash can be used to capture photographic subjects that are too distant for the built-in flash to illuminate.

Other Accessories

Waterproof Case WP-DC38

- Use this case to take underwater shots at depths of up to 40 meters (130 ft.), or to shoot in the rain, at the beach, or on the ski slopes.

Waterproof Case Weight WW-DC1

- When using the Waterproof Case to take photographs underwater, the weights prevent the case from floating.

HDMI Cable HTC-100

- Use this cable to connect the camera to the HDMI™ terminal on a high-definition TV set.

Printers

SELPHY series

PIXMA series

Canon-Brand PictBridge Compliant Printers

- By connecting your camera to a Canon-brand PictBridge compliant printer, you can print your images without having to use a computer.
  For more information, visit your nearest Canon retailer.

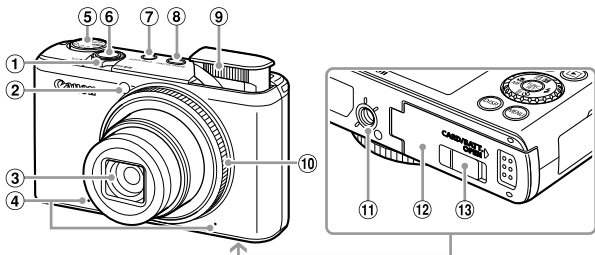
Use of genuine Canon accessories is recommended.

This product is designed to achieve excellent performance when used with genuine Canon accessories. Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). Please note that this warranty does not apply to repairs arising out of the malfunction of non-genuine Canon accessories, although you may request such repairs on a chargeable basis.

2

Learning More

This chapter explains the parts of the camera and what appears on the screen, as well as the basic operating instructions.

Components Guide

① Zoom Lever
Shooting: (Telephoto) / (Wide Angle) (pp. 24, 29, 55)
Playback: (Magnify) / (Index) (pp. 122, 127)

② Lamp (pp. 59, 64, 65, 66, 162, 163)

③ Lens

④ Microphone (p. 30)

⑤ Mode Dial

⑥ Shutter Button (p. 23)

⑦ Power Button (p. 19)

⑧ RING FUNC. (Ring Function Selector) Button (p. 101)

⑨ Flash (pp. 25, 54, 75)

⑩ Control Ring (pp. 24, 101)

⑪ Tripod Socket

⑫ Memory Card / Battery Cover (p. 17)

⑬ DC Coupler Terminal Cover (p. 170)

Mode Dial

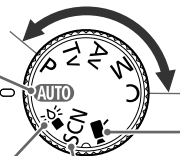
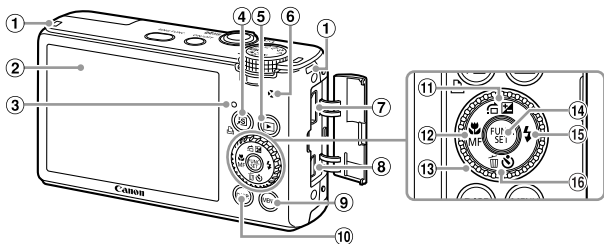
Use the mode dial to change the Shooting mode.

P, Tv, Av, M, C Mode
Choose settings yourself to take various types of pictures (pp. 74, 98, 99, 100, 108).

Auto Mode
You can leave it to the camera to select settings for fully automatic shooting (p. 24).

Low Light Mode
Allows you to shoot in dimly lit places with reduced camera shake and subject blur (p. 60).

Movie Mode
For shooting movies (pp. 29, 113).

Special Scene Mode
You can shoot with the best settings for the scene or add various effects and shoot (p. 61).

① Strap Mount (p. 13)
② Screen (LCD Monitor) (pp. 44, 178, 180)
③ Indicator (p. 45)
④ (Short Cut) Button (p. 166) / (Direct Print) (p. 148)
⑤ (Playback) Button (pp. 27, 121)
⑥ Speaker
⑦ HDMI Terminal (p. 130)
⑧ A/V OUT (Audio/Video Output) / DIGITAL Terminal (pp. 34, 129, 148)
⑨ MENU Button (p. 47)
⑩ DISP. (Display) Button (p. 44)
⑪ (Exposure Compensation) (p. 74) / (Jump) (p. 123) / ▲ Button
⑫ (Macro) (p. 75) / MF (Manual Focus) (p. 93) / ◀ Button
⑬ Control Dial
⑭ FUNC./SET Button (p. 46)
⑮ (Flash) (pp. 75, 106) / ▶ Button
⑯ (Self-Timer) (p. 59) / (Single Image Erase) (p. 28) / ▼ Button

Control Dial

Turning the control dial allows you to perform operations such as choosing items or switching images. Except for a few operations, the same operations are possible with the ▲▼◀▶ buttons.

Screen Display

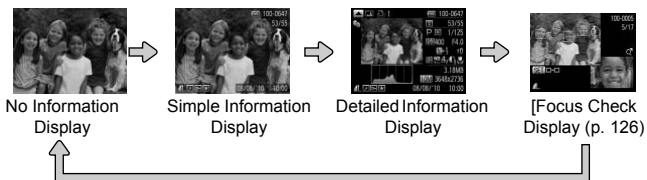
Switching the Display

You can change the screen display using the DISP. button. Refer to p. 178 for details on information that appears on the screen.

Shooting

Display 1　　Display 2

Playback

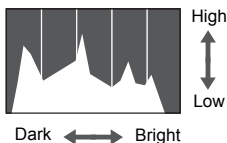
No Information Display　Simple Information Display　Detailed Information Display　[Focus Check Display (p. 126)]

You can also switch the display by pressing the DISP. button while the image displays right after shooting. However, Simple Information Display is not available. You can change the display that appears first by pressing the MENU button, then choosing [Review info] in the tab (p. 164).

Screen Display in Dark Shooting Conditions

The display automatically brightens when shooting in dark conditions, allowing you to check the composition (Night Display function). However, the brightness of the image on the screen, and the brightness of the actual image recorded may be different. Screen noise may appear and the movement of the subject may appear somewhat jagged on the screen. This has no effect on the recorded image.

Overexposure Warning during Playback

In “Detailed Information Display”, overexposed areas of the image flash on the screen.

Histogram during Playback

- The graph that appears in “Detailed Information Display” (p. 44) is called the histogram. The histogram shows the distribution of brightness in an image horizontally, and the amount of brightness vertically. When the graph approaches the right side, the image is bright, but when it approaches the left side, the image is dark, and in this way you can judge the exposure.
- The histogram can also be displayed while shooting (p. 164).

RGB Histogram

RGB Histogram

- If you press the ▲ button in "Detailed Information Display", the RGB histogram will appear. The RGB histogram shows the distribution of shades of red, blue and green in an image. The shades are shown horizontally, and the amount of each shade vertically. In this way you can judge the color of an image.
- Press the ▲ button again to restore "Detailed Information Display".

Indicator

The indicator on the back of the camera (p. 43) will light or blink depending on the camera’s status.

Colors	Status	Operation Status
Green	Lights	Shooting preparation complete/Display off (p. 160)
	Blinks	Recording/reading/transmitting image data
Orange	Lights	Shooting preparation complete (flash on)
	Blinks	Camera shake warning (p. 54)

When the indicator blinks green, data is being recorded/read or various information is being transmitted. Do not turn off the power, open the memory card slot/battery cover, shake or jolt the camera. These actions may corrupt the image data or cause the camera or memory card to malfunction.

FUNC. Menu – Basic Operations

You can set commonly used functions using the FUNC. menu.
The menu items and options differ depending on the Shooting mode (pp. 182 – 183).

1 Choose a Shooting mode.

- Set the mode dial to the desired shooting mode.

2 Display the FUNC. menu.

- Press the FUNC./SET button.

3 Choose a menu item.

- Press the ▲▼ buttons to choose a menu item.
- ▶ The available options for the menu item appear in the lower part of the screen.

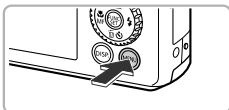
4 Choose an option.

- Press the ◀▶ buttons or turn the dial to choose an option.
- You can also choose settings by pressing the DISP. button on options that display DISP. .

5 Complete the setting.

- Press the FUNC./SET button.
- ▶ The shooting screen will reappear and the setting you chose will display on the screen.

MENU – Basic Operations

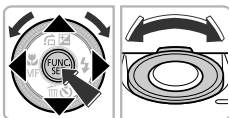
Various functions can be set from the menus. The menu items are organized under tabs, such as for shooting (📷) and playback (▶). The options differ depending on the Shooting mode and the Playback mode (pp. 184 – 187).

1 Display the menu.

- Press the MENU button.

2 Choose a tab.

- Press the ◀▶ buttons, or move the zoom lever left or right to choose a tab.

3 Choose an item.

- Press the ▲▼ buttons or turn the ● dial to choose an item.
- Some items require you to press the FUNC./SET or ▶ button to display a submenu in which you change the setting.

4 Choose an option.

- Press the ◀▶ buttons to choose an option.

5 Complete the setting.

- Press the MENU button to restore the normal screen.

Changing the Sound Settings

You can silence or adjust the volume of camera sounds.

Muting Sounds

1 Display the menu.

- Press the MENU button.

2 Choose [Mute].

- Press the ◀▶ buttons to choose the 🔧 tab.
- Press the ▲▼ buttons or turn the ● dial to choose [Mute], then press the ◀▶ buttons to choose [On].
- Press the MENU button to restore the normal screen.

You can also mute camera sounds by holding down the DISP. button and turning on the power.

Adjusting the Volume

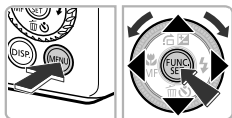
1 Display the menu.

- Press the MENU button.

2 Choose [Volume].

- Press the ◀▶ buttons to choose the 🔧 tab.
- Press the ▲▼ buttons or turn the ● dial to choose [Volume], then press the FUNC./SET button.

3 Change the volume.

- Press the ▲▼ buttons or turn the ● dial to choose an item, then press the ◀▶ buttons to adjust the volume.
- Press the MENU button twice to restore the normal screen.

Changing the Screen Brightness

The screen brightness can be changed in two ways.

Using the Menu

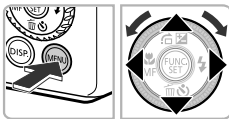
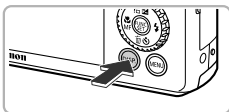
1 Display the menu.

- Press the MENU button.

2 Choose [LCD Brightness].

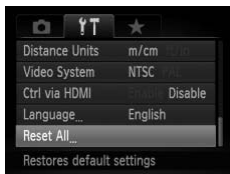
- Press the ◀▶ buttons to choose the tab.
- Press the ▲▼ buttons or turn the dial to choose [LCD Brightness].

3 Change the brightness.

- Press the ◀▶ buttons to change the brightness.
- Press the MENU button twice to restore the normal screen.

Using the DISP. Button

- Press the DISP. button for more than one second.
- ▶ The screen increases to maximum brightness regardless of the setting in the tab.
- Pressing the DISP. button again for more than one second will return the screen to the original brightness.

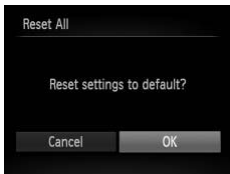
- The next time you turn on the camera, the screen will be at the brightness setting chosen in the tab.
- When you have set the brightness to its highest setting in the tab, you cannot change the brightness with the DISP. button.

Returning the Camera to Default Settings

When you have mistakenly changed a setting, you can reset the camera to the default settings.

1 Display the menu.

- Press the MENU button.

2 Choose [Reset All].

- Press the ◀▶ buttons to choose the ƒ† tab.
- Press the ▲▼ buttons or turn the ● dial to choose [Reset All], then press the (FUNC/SET) button.

3 Reset the settings.

- Press the ◀▶ buttons or turn the ● dial to choose [OK], then press the (FUNC/SET) button.
- ▶ The camera will reset to the default settings.

? Are there functions that cannot be reset?

- The [Date/Time] (p. 20) in the ƒ† tab, [Language] (p. 21), [Video System] (p. 129), [Time Zone] (p. 160), and the image registered in [Start-up Image] (p. 157).
- The saved data for custom white balance (p. 82).
- Colors that were chosen in Color Accent (p. 109) or Color Swap (p. 110).
- The scene mode chosen in SCN (p. 61).
- The Movie mode (p. 114).

Power Saving Function (Auto Power Down)

To save battery power, the screen turns off, and the camera shuts down automatically when it is not operated for a certain time.

Power Saving during Shooting

The screen will turn off approximately 1 minute after the camera is last operated. After about 2 more minutes, the lens will retract and the power will turn off. When the screen has turned off but the lens has not yet retracted, pressing the shutter button halfway (p. 23) turns on the screen and shooting can continue.

Power Saving during Playback

The power will turn off approximately 5 minutes after the camera is last operated.

- You can turn off the power saving function (p. 159).
- You can adjust the time before the screen turns off (p. 160).

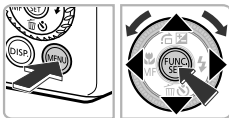
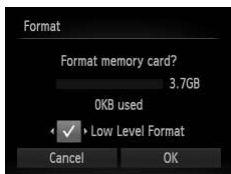
Low Level Memory Card Formatting

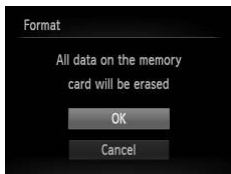
Perform low level formatting when [Memory card error] appears, the camera does not operate properly, or you think that the recording/reading speed of a memory card has dropped. As you cannot retrieve the erased data, exercise adequate caution before formatting the memory card.

1 Display the menu.

- Press the MENU button.

2 Choose [Format].

- Press the ◀▶ buttons to choose the 🔧 tab.
- Press the ▲▼ buttons or turn the ◉ dial to choose [Format], then press the (FUNC. SET) button.

3 Choose [Low Level Format].

- Press the ▲▼ buttons or turn the dial to choose [Low Level Format], then press the ◀▶ buttons to display ✓.
- Press the ▲▼◀▶ buttons or turn the dial to choose [OK], then press the FUNC./SET button.

4 Start the low level format.

- Press the ▲▼ buttons or turn the dial to choose [OK], then press the FUNC./SET button.
- ▶ Low level formatting starts.
- ▶ When low level formatting ends, [Memory card formatting complete] will appear.

5 Complete the low level format.

- Press the FUNC./SET button.

- Low level formatting may take longer than standard formatting (p. 22), since all recorded data is erased.
- You can stop a low level format of a memory card by choosing [Stop]. When stopping low level formatting, the data will be erased but the memory card can be used without problem.

Clock Functions

You can check the current time.

- Press and hold the FUNC./SET button.
- ▶ The current time appears.
- If you hold the camera vertically while using the clock function, it will switch to vertical display. Press the ◀▶ buttons or turn the dial to change the display color.
- Press the FUNC./SET button again to cancel the clock display.

When the camera power is off, press and hold the FUNC./SET button, then press the power button to display the clock.

3

Shooting with Commonly Used Functions

This chapter explains how to shoot in different conditions, as well as how to use common functions, such as the self-timer, and turn off the flash.

- This chapter assumes the camera is set to AUTO mode for “Turning the Flash Off” (p. 54) to “Using the Self-Timer” (p. 59). When shooting in a mode other than AUTO, check which functions are available in that mode (pp. 182 – 183).
- “Shooting in Low Light Conditions (Low Light)” (p. 60) to “Take Shots That Look Like a Miniature Model (Miniature Effect)” (p. 72) assumes that the corresponding mode has been chosen.

Turning the Flash Off

You can shoot with the flash turned off.

1 Press the ▶ button.

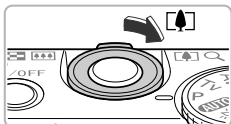
2 Choose ⓕ.

- Press the ◀▶ buttons or turn the ● dial to choose ⓕ, then press the (FUNC. SET) button.
- ▶ If the flash has been raised, the flash will lower automatically.
- ▶ Once set, ⓕ will appear on the screen.
- To turn the flash back on, follow the Steps above to return the setting to ⚡A.

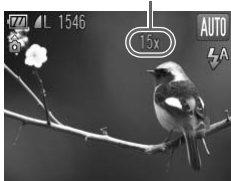
What if the indicator blinks orange and a flashing (camera shake icon) appears?

When you press the shutter button halfway in low light conditions where camera shake is likely, the indicator will blink orange and a flashing (camera shake icon) will appear on the screen. Attach the camera to a tripod to prevent it from moving.

Zooming in More Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to approximately 15x and capture subjects that are too far away for the optical zoom to enlarge. The images may appear coarse, however, depending on the recording pixel setting (p. 76) and the zoom factor used.

1 Move the zoom lever toward [♠].

- Hold the lever until zooming stops.
- ▶ The zoom will stop when the largest possible zoom factor without image deterioration has been reached, and the zoom factor will appear when you release the zoom lever.

Zoom Factor

2 Move it toward [♠] again.

- ▶ The digital zoom will zoom in even further on the subject.

What if the zoom factor appears in blue?

Images shot at zoom factors that appear in blue will be coarse.

Turning off the digital zoom

To turn off the digital zoom, press the MENU button to choose [Digital Zoom] in the tab, then choose [Off].

The focal length when using the optical zoom and digital zoom together is 28 – 420 mm, and 28 – 105 mm when using the optical zoom alone (all focal lengths are 35mm film equivalent).

Digital Tele-Converter

The focal length of the lens can be increased by approx. 1.4x or approx. 2.3x. This enables a faster shutter speed and less chance of camera shake than the zoom (including digital zoom) used by itself at the same zoom factor. The images may appear coarse, however, depending on the combination of recording pixel (p. 76) and digital tele-converter settings used.

1 Choose [Digital Zoom].

- Press the MENU button.
- Press the ◀▶ buttons to choose the 📷 tab.
- Press the ▲▼ buttons or turn the dial to choose [Digital Zoom].

2 Accept the setting.

- Press the ◀▶ buttons to choose a magnification.
- Pressing the MENU button will restore the shooting screen.
- ▶ The view will be enlarged and the zoom factor will appear on the screen.
- To return to standard digital zoom, choose [Digital Zoom] and the [Standard] option.

What if the zoom factor appears in blue?

Using this function at a recording pixel setting of L or M1 will cause image deterioration (the zoom factor will appear in blue).

- The respective focal lengths when using [1.4x] and [2.3x] are 39.2 – 147 mm and 64.4 – 241.5 mm (35mm film equivalent).
- The digital tele-converter cannot be used together with the digital zoom.

Shoot Using Preset Focal Lengths (Step Zoom)

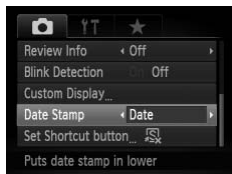
You can shoot using preset focal lengths of 28 mm, 35 mm, 50 mm, 85 mm or 105 mm (35mm film equivalents). This feature is useful when you want to shoot at a particular focal length.

Choose a focal length.

- Turn the () ring.
- Turn the () ring counter clockwise until you hear a clicking sound and the focal length changes from 28 mm to 35 mm. If you continue to turn the () ring, the focal length will be set to 50 mm, 85 mm, and 105 mm.

While in digital zoom (p. 55), turning the () ring counterclockwise will not change the zoom settings. However, turning it clockwise will set the focal length to 105 mm.

Inserting the Date and Time

You can insert the shooting date and time in the lower right corner of an image. Once inserted, however, they cannot be deleted. Be sure to check beforehand that the date and time are correctly set (p. 19).

1 Choose [Date Stamp].

- Press the MENU button.
- Press the ◀▶ buttons to choose the 📷 tab.
- Press the ▲▼ buttons or turn the ● dial to choose [Date Stamp].

2 Accept the setting.

- Press the ◀▶ buttons to choose [Date] or [Date & Time].
- Pressing the MENU button will restore the shooting screen.
- ▶ Once set, [DATE] will appear on the screen.

3 Shoot.

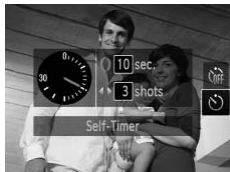
- ▶ The shooting date or time will be recorded in the image's lower right corner.
- To restore to the original setting, choose [Off] in Step 2.

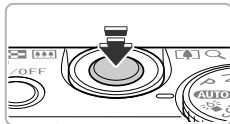
You can insert and print the shooting date in images which do not have an embedded date and time as follows. However, if you do this for images with an embedded date and time, the date and time may be printed twice.

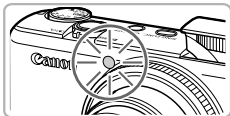
- **Use the DPOF print settings (p. 151) to print.**
- **Use the included software to print.**
  Refer to the *Software Guide* for details.
- **Print using printer functions.**
  Refer to the *Personal Printing Guide* for details.

Using the Self-Timer

Use the self timer for pictures where the photographer is also included in the shot. You can set the time delay between when the shutter button is pressed and the shot is taken (0 – 30 seconds) and also the number of shots (1 – 10 shots).

1 Press the ▼ button.

2 Choose ⏲.

- Press the ▲▼ buttons or turn the ◎ dial to choose ⏲, then press the (FUNC. SET) button.
- Immediately turn the () ring to choose the time delay, then press the ◀▶ buttons to choose the number of shots and press the (FUNC. SET) button.
- ▶ Once set, ⏲ will appear on the screen.

3 Shoot.

- Press the shutter button halfway to focus on the subject, then press it fully.
- ▶ When the self-timer starts, the lamp blinks and the self-timer sound plays.
- To cancel shooting with the timer after countdown has started, press the ▼ button.
- To restore the original setting, choose ⏲OFF in Step 2.

What if the number of shots is set to two or more shots?

- Exposure and white balance settings are set with the first shot.
- If the flash fires or you set a high number of shots, the shooting interval may take longer than usual.
- If the memory card becomes full, shooting stops automatically.

When you set the time delay for more than 2 seconds, the self-timer lamp and sound speed up 2 seconds before the shutter releases (when the flash will fire, the lamp lights).

Shooting in Low Light Conditions (Low Light)

Allows you to shoot in dimly lit places with reduced camera shake and subject blur.

1 Enter mode.

- Set the mode dial to .

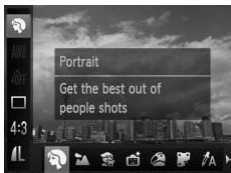
2 Shoot.

- A recording pixel setting of M will appear, and the image will be fixed at 1824 x 1368 pixels.
- In ISO AUTO, depending on the scene, a high ISO speed will be automatically set.
- You can set a higher ISO speed than in other modes (p. 80).

Shooting in Various Conditions

The camera will select the necessary settings for the conditions in which you wish to shoot when you choose the matching mode.

1 Enter SCN mode.

- Set the mode dial to SCN.

2 Choose the Shooting mode.

- After pressing the (FUNC./SET) button, press the ▲▼ buttons to choose (Portrait).
- Press the ▲▼ buttons or turn the (control) dial to choose a Shooting mode, then press the (FUNC./SET) button.

3 Shoot.

Take portraits (Portrait)

- Produces a soft effect when photographing people.

Take landscapes (Landscape)

- Lets you shoot majestic landscapes with a real sense of depth.

Take shots of kids and pets (Kids&Pets)

- Lets you capture subjects that move around, such as children and pets, without missing photo opportunities.
- You will be able to focus on subjects that are approx. 1 meter (3.3 ft.) or more away from the end of the lens.

Take shots of people at the beach (Beach)

- Lets you take shots of brightly lit people on sandy beaches where the reflected sunlight is strong.

Shoot underwater (Underwater)

- Lets you take natural-colored shots of aquatic life and underwater scenery when used with Waterproof Case WP-DC38 (sold separately).

Take shots of foliage (Foliage)

- Lets you shoot trees and leaves, such as new growth, autumn leaves or blossoms, in vivid colors.

Take shots of people in snow (Snow)

- Lets you take bright, natural-colored shots of people against snowy backgrounds.

Take shots of fireworks (Fireworks)

- Lets you take shots of fireworks in vivid colors.

In mode, attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you should set the [IS Mode] to [Off] when shooting with a tripod (p. 165).

In or mode, images may appear coarse because the ISO speed (p. 80) is increased to match the shooting conditions.

Adding Effects and Shooting

Shoot images with vivid colors (Super Vivid)

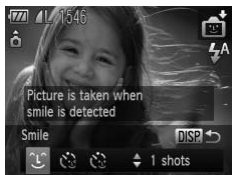
- Lets you take shots with vivid, intense colors.

Take posterized shots (Poster Effect)

- Lets you take shots that look like an old poster or illustration.

Since you may not achieve the expected results with images shot in and , try taking some test shots first.

Detecting a Smile and Shooting

The camera will shoot, even without pressing the shutter button, when it detects a smile.

1 Choose .

- Follow Steps 1 – 2 on p. 61 to choose , then press the DISP. button.
- Press the ◀▶ buttons or turn the dial to choose , then press the DISP. button.

▶ The camera will enter shooting stand-by, and [Smile Detection on] will appear on the screen.

2 Point the camera at a person.

- Each time the camera detects a smile it will shoot after the lamp lights.
- Pressing the ▼ button will pause smile detection. Press the ▼ button again to resume smile detection.

What if a smile is not detected?

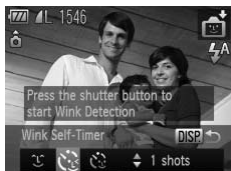
Smiles are easier to detect if the subject faces the camera, and opens their mouth enough to show some teeth when smiling.

Changing the number of shots

After choosing in Step 1, press the ▲▼ buttons.

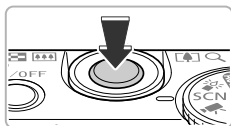
- You should switch to another mode when you finish shooting, or the camera will continue taking shots each time the camera detects a smile.
- You can also shoot by pressing the shutter button.

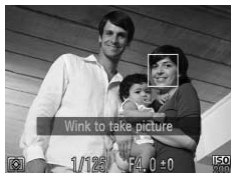
Using the Wink Self-Timer

Point the camera at a person and press the shutter button fully. The camera will shoot approximately two seconds after it detects a wink.

1 Choose [wink self-timer icon].

- Follow Steps 1 – 2 on p. 61 to choose [icon], then press the DISP. button.
- Press the ◀▶ buttons or turn the [dial icon] dial to choose [wink self-timer icon], then press the DISP. button.

2 Compose the shot and press the shutter button halfway.

- Confirm that a green frame appears around the face of the person who will wink.

3 Press the shutter button fully.

- ▶ The camera will enter shooting stand-by, and [Wink to take picture] will appear on the screen.
- ▶ The lamp will blink and the self-timer sound will play.

4 Face the camera and wink.

- ▶ The shutter will release approximately 2 seconds after a wink is detected from the person with a frame around the person's face.
- To cancel the countdown, press the ▼ button.

What if a wink is not detected?

- Wink a bit slowly.
- A wink may not be detected if eyes are covered by hair or a hat, or when wearing glasses.

Changing the number of shots

After choosing in Step 1, press the ▲▼ buttons.

- Shutting both eyes will also be detected as a wink.
- If a wink is not detected, the shutter will release approximately 15 seconds later.
- If there are no people in the shot when the shutter button is pressed fully, the camera will shoot after a person enters the shot and winks.

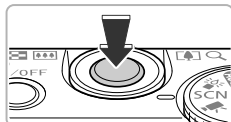
Using the Face Self-Timer

The shutter will release approximately two seconds after the camera detects a new face (p. 88). You can use this when the photographer wants to be in the image, such as a group photo.

1 Choose .

- Follow Steps 1 – 2 on p. 61 to choose , then press the DISP. button.
- Press the ◀▶ buttons or turn the dial to choose , then press the DISP. button.

2 Compose the shot and press the shutter button halfway.

- Make sure a green frame appears on the face focused on and white frames appear on other faces.

3 Press the shutter button fully.

- The camera will enter shooting stand-by, and [Look straight at camera to start count down] will appear on the screen.
- The lamp will blink and the self-timer sound will play.

4 Join the subjects and look at the camera.

▶ When the camera detects a new face, the lamp and sound will speed up (the lamp remains lit when the flash will fire), and two seconds later the shutter will release.

● To cancel shooting with the timer after countdown has started, press the ▼ button.

Changing the number of shots

After choosing in Step 1, press the ▲▼ buttons.

Even if your face is not detected after joining the subjects, the shutter will release approximately 15 seconds later.

Shooting High Contrast Scenes (High Dynamic Range)

The camera takes three successive shots at different brightness settings, then selects and combines the areas with the best brightness into one image. This lets you reduce highlight blowout and loss of details in shadow areas commonly found in high contrast scenes.

1 Choose HDR.

- Follow Steps 1 – 2 on p. 61 to choose HDR.

2 Secure the camera.

- Attach the camera to a tripod to prevent the camera from moving and blurring the image.

3 Shoot.

- The camera will combine the three shots it took after you pressed the shutter button fully.

You should set the [IS Mode] to [Off] (p. 165) when shooting in this mode.

- Since you may not achieve the expected results depending on the shooting conditions, try taking some test shots first.
- The subject will appear blurred if it moves.
- Since the images are combined after shooting, a certain amount of processing time may be needed before you can take the next shot.

Adding Color Effects

Choose a color effect.

- Follow Steps 1 – 2 on p. 61 to choose HDR.
- After pressing the DISP. button, press the ◀▶ buttons or turn the dial to choose a color effect, then press the DISP. button again.

Color Effects

Effect Off	—
Sepia	Sepia tones.
B/W	Black and white.
Super Vivid	Lets you take shots with vivid, intense colors.
Poster Effect	Lets you take shots that look like an old poster or illustration.

Shooting with Faded Colors (Nostalgic)

This effect fades the colors and roughens the image so that it looks like an old photograph. You can choose from 5 effect levels.

1 Choose .

- Follow Steps 1 – 2 on p. 61 to choose .

2 Choose the effect level.

- Turn the ring to choose the effect level.

3 Shoot.

- Digital Zoom (p. 55), date stamp (p. 58), and red-eye correction (p. 105) are not available.
- In the shooting screen, the colors will change, but the roughening effect will not show. You can check this effect in image playback (p. 27).
- In some cases, you may not obtain the expected result.

Shoot with the Effects of a Fish-Eye Lens (Fish-eye Effect)

Lets you shoot with the distorting effect of a fish-eye lens.

1 Choose [fish-eye icon].

- Follow Steps 1 – 2 on p. 61 to choose [fish-eye icon].

2 Choose an effect level.

- Press the DISP. button.
- ▶ [Effect Level] will appear on the screen.
- Press the ◀▶ buttons or turn the [dial] dial to choose an effect level, then press the DISP. button.
- ▶ You can check the effect on the screen.

3 Shoot.

Since you may not achieve the expected results depending on the shooting conditions, try taking some test shots first.

Take Shots That Look Like a Miniature Model (Miniature Effect)

Blurs chosen portions in the top and bottom of an image to produce the effect of a miniature model.

Choose .

- Follow Steps 1 – 2 on p. 61 to choose .
- ▶ A white frame (the area that will not be blurred) appears on the screen.

2 Choose the area to keep in focus.

- Press the DISP. button.
- Move the zoom lever to change the frame size, and press the ▲▼ buttons to change the frame position.
- Pressing the DISP. button restores the shooting screen.

Shoot.

- If you press the FUNC./SET button in Step 2, the horizontal/vertical orientation of the frame will switch, and you can use the ◀▶ buttons to change the frame position when it is displayed vertically.
- Holding the camera vertically will change the orientation of the frame.
- Since you may not achieve the expected results depending on the shooting conditions, try taking some test shots first.

Modes for other scenes

In addition to the modes explained here, the following scene modes are also available:

- Color Accent (p. 109)
- Color Swap (p. 110)
- Stitch Assist (p. 112)

4

Choosing Settings Yourself

In this chapter you will learn how to use the various functions in **P** mode to progressively advance your shooting skills.

- This chapter assumes that you have set the mode dial to **P**.
- **P** stands for Program AE.
- Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 182 – 185).

Shooting in Program AE

You can choose the settings for various functions to suit your preferences. AE stands for Auto Exposure.

1 Enter P mode.

- Set the mode dial to P.

2 Adjust the settings according to your purposes (pp. 75 – 86).

3 Shoot.

What if the shutter speed and aperture value appear in orange?

If a correct exposure cannot be obtained when pressing the shutter button halfway, the shutter speed and aperture value are shown in orange. Try the following settings to obtain the correct exposure.

- Turn on the flash (p. 75)
- Choose a higher ISO speed (p. 80)

Adjusting the Brightness (Exposure Compensation)

You can adjust the standard exposure set by the camera in 1/3-stop increments in the range of -2 to +2.

Adjust the brightness.

- While watching the screen, turn the dial to adjust the brightness.
- ▶ The exposure compensation amount will appear on the screen.

You can also adjust the exposure using the ring (p. 101).

Turning the Flash On

You can make the flash fire every time you shoot. The effective flash range is approximately 50 cm – 6.5 m (1.6 – 21 ft.) at maximum wide angle ([wide]), and approximately 90 cm – 3.0 m (3.0 – 9.8 ft.) at maximum telephoto ([tele]).

Choose ⚡.

- After pressing the ▶ button, press the ◀▶ buttons or turn the ● dial to choose ⚡, then press the (FUNC. SET) button.
- ▷ If the flash has been lowered, the flash will rise automatically.
- ▷ Once set, ⚡ will appear on the screen.

Changing the Focusing Range (Macro)

When it is difficult to focus because your shot contains subjects that are near, you can change the focusing range to focus more reliably.

Choose 🌷.

- After pressing the ◀ button, press the ◀▶ buttons or turn the ● dial to choose 🌷, then press the (FUNC. SET) button.
- ▷ Once set, 🌷 will appear on the screen.

	Focusing Range	Description
🌷	Approx. 5 – 50 cm (2.0 in. – 1.6 ft.)*	Only focuses on close subjects.

* When at the maximum wide angle ([wide]) setting of the lens.

In macro shooting, the edges of the image may darken if the flash fires.

How can I take better close-ups?

Try attaching the camera to a tripod and shooting with the self-timer to prevent the camera from moving and blurring the image (p. 59).

Changing the Recording Pixel Setting (Image Size)

You can choose from four recording pixel (image size) settings.

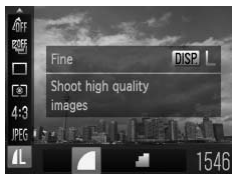
1 Choose the recording pixel setting.

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose L.

2 Choose an option.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the FUNC./SET button.
- ▶ The setting will appear on the screen.

Changing the Compression Ratio (Image Quality)

You can choose from the following two compression ratios (image quality): (Fine), (Normal).

1 Choose the compression ratio setting.

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose L, then press the DISP. button.

2 Choose an option.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the FUNC./SET button.
- ▶ The setting will appear on the screen.

Approximate Values for Recording Pixels and Compression Ratio (4:3 Aspect Ratio)

Recording Pixels	Compression Ratio	Single Image Data Size (Approx. KB)	Number of Shots per Memory Card	
			4 GB	16 GB
L (Large) 10M/3648x2736	Superfine	2565	1471	6026
	Fine	1226	3017	12354
M1 (Medium 1) 6M/2816x2112	Superfine	1620	2320	9503
	Fine	780	4641	19007
M2 (Medium 2) 2M/1600x1200	Superfine	558	6352	26010
	Fine	278	12069	49420
S (Small) 0.3M/640x480	Superfine	150	20116	82367
	Fine	84	30174	123550

- The values in the table are measured according to Canon standards and may change depending on the subject, memory card and camera settings.
- The values in the table are based on a 4:3 aspect ratio. If the aspect ratio is changed (p. 79), more images can be shot because the data size per image will be smaller than with 4:3 images. However, since 16:9 M2 images have a setting of 1920 x 1080 pixels, their data size will be larger than 4:3 M2 images.

Approximate Values for Paper Size (4:3 Aspect Ratio)

- S Suitable for sending images as e-mail attachments.

Shooting RAW Images

A RAW image is raw data recorded with nearly no deterioration in image quality resulting from image processing inside the camera. You can use the supplied software to adjust the image in any way you like with minimal loss in image quality.

1 Choose JPEG.

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose JPEG.

2 Choose a menu option.

- Press the ◀▶ buttons or turn the dial to choose RAW or RAW+JPEG, then press the FUNC./SET button.

JPEG	Records a JPEG image. When JPEG images are recorded, the images are processed inside the camera for optimum image quality and compressed. However, the compression process is irreversible, meaning that the raw data cannot be recovered once it has been compressed. Moreover, the image processing results in a deterioration in quality.
RAW	Records a RAW image. A RAW image is raw data recorded with nearly no deterioration in image quality resulting from image processing inside the camera. This data cannot be used as is for viewing or printing on a computer. The supplied software (Digital Photo Professional) must first be used to convert the image data to a JPEG or TIFF file. When converting the image data, you can adjust the image with minimal deterioration in image quality. Recording pixels will be fixed to 3648 x 2736, and data size of a single image will be approximately 14297 KB.
RAW+JPEG	Two images, a RAW image and a JPEG image, will be recorded with each shot. Since a JPEG image is also recorded, you can print the image or view it on a computer without using the supplied software.

Be sure to use the supplied software when transferring both the RAW images and the JPEG images that were recorded at the same time to a computer.

How do you erase images shot with RAW+JPEG?

If you press the ▼ button (p. 28) while viewing a RAW+JPEG image, you can select from [Erase RAW], [Erase JPEG] or [Erase RAW+JPEG].

- Digital Zoom (p. 55) and Date Stamp (p. 58) are not available when shooting in RAW or RAW+JPEG.
- The file extension for JPEG images is ”.JPG”, and the extension for RAW images is ”.CR2”

Changing the Aspect Ratio

You can change the width to height ratio of an image.

1 Choose .

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose .

2 Choose an option.

- Press the ◀▶ buttons or turn the dial to choose a option, then press the FUNC./SET button.

16:9	Same aspect ratio as wide screen high definition televisions.
3:2	Same aspect ratio as 35mm film. Suitable for printing out 5" x 7" or postcard sized images.
4:3	Same aspect ratio as the screen of this camera. Suitable for printing out 3.5" x 5" sized images.
1:1	Square-shaped aspect ratio.
4:5	An aspect ratio well suited for portraits.

- The aspect ratio for RAW and RAW+JPEG (p. 78) images is fixed at 4:3.
- The digital zoom (p. 55) is only available in 4:3.
- You can also set the camera so that turning the ring changes the aspect ratio (p. 101).

Changing the ISO Speed

1 Choose the ISO speed.

- Turn the ring to choose an ISO speed.
- ▶ The setting will appear on the screen.

ISO AUTO	Automatically adjusts the ISO speed to the Shooting mode and shooting conditions.	
ISO 80 ISO 100 ISO 125 ISO 160 ISO 200	Low	Fine weather conditions, outdoor shooting.
ISO 250 ISO 320 ISO 400 ISO 500 ISO 640 ISO 800	↕	Cloudy, twilight
ISO 1000 ISO 1250 ISO 1600 ISO 2000 ISO 2500 ISO 3200	High	Nightscapes, dark interiors

Changing the ISO speed

- Lowering the ISO speed results in sharper images, but there may be an increased chance of subject or image blurring in certain shooting conditions.
- Raising the ISO speed results in a faster shutter speed, reducing image blurring and letting the flash reach greater distances to the subject. The images, however, will appear coarse.

What if images are still blurry?

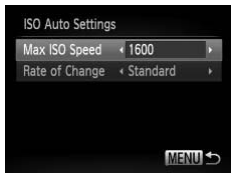
If ISO 3200 still is not enough to suppress camera shake, the mode (p. 60) allows ISO speed settings of ISO 4000 ISO 5000 ISO 6400 ISO 8000 ISO 10000 and ISO 12800.
In mode, set the ISO speed by pressing the FUNC./SET button and selecting ISO AUTO. Then press the ◀▶ buttons or turning the dial to choose an option and press the FUNC./SET button.

- You can also set the ISO speed by pressing the FUNC./SET button and choosing ISO AUTO. Press the ◀▶ buttons or turn the dial to choose a setting, then press the FUNC./SET button again. Press the DISP. button while in the setting screen to set ISO AUTO.
- When the camera is set to ISO AUTO, you can press the shutter button halfway to display the automatically set ISO speed.

Changing the Maximum ISO Speed for ISO AUTO

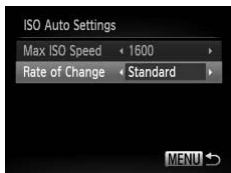
You can set a maximum ISO speed of ISO 400 – ISO 1600 for ISO AUTO.

1 Choose [ISO Auto Settings].

- Press the MENU button to choose ISO Auto Settings] in the camera tab, then press the FUNC./SET button.

2 Choose the maximum ISO speed.

- Press the ▲▼ buttons or turn the dial to choose [Max ISO Speed], then press the ◀▶ buttons to choose a setting.

Changing the Rate of Change for ISO AUTO

You can choose [Fast], [Slow] or [Standard] rates of change for ISO AUTO.

Choose the rate of change.

- Follow Steps 1 – 2 above to choose [Rate of Change].
- Press the ◀▶ buttons to choose an option.

Shooting Using a TV Monitor

You can use a TV to display the camera screen content while shooting.

- To connect the camera to a TV, follow the Steps in “Viewing Images on a TV” (p. 129).
- Shooting procedures are the same as when using the camera screen.

TV display is not available when using HDMI Cable HTC-100 (sold separately) to connect the camera to a high-definition TV.

Adjusting the White Balance

The white balance (WB) function sets the optimal white balance for natural looking colors to match the shooting conditions.

1 Choose the white balance function.

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose AWB.

2 Choose an option.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the FUNC./SET button.
- ▶ The setting will appear on the screen.

AWB	Auto	Automatically sets the optimal white balance for the shooting conditions.
	Day Light	Fine weather conditions, outdoor shooting
	Cloudy	Cloudy, shady, twilight conditions
	Tungsten	Tungsten, bulb-type (3-wavelength) fluorescent lighting
	Fluorescent	Warm-white fluorescent, cool-white fluorescent, warm-white-type (3-wavelength) fluorescent lighting
	Fluorescent H	Daylight fluorescent, daylight-type (3-wavelength) fluorescent lighting
	Flash	For shooting with the flash.
	Underwater	Sets the optimum white balance, and tones down blues for taking pictures with natural colors underwater.
	Custom	Manually sets a custom white balance.

Custom White Balance

You can adjust the white balance to the light source at the shooting location. Make sure that you set the white balance under the light source of the actual scene you will shoot.

- In Step 2 above, choose Custom.
- Make sure the entire screen is filled with a plain, white colored subject, then press the MENU button.
- ▶ The tint on the screen will change when a white balance data is set.

If you change camera settings after recording white balance data, the tone may not turn out properly.

Correcting the White Balance

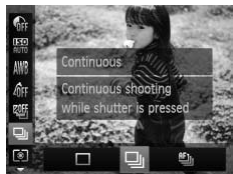
You can correct the white balance. This adjustment will have the same effect as using a commercially-available color temperature conversion filter or color compensating filter.

Correct the White Balance.

- In Step 1 on p. 82, choose AWB and turn the ring to adjust the level of correction for B and A.
- The WB +/- icon will appear on the screen.
- For even more specific adjustments, press the DISP. button.
- The selection screen appears.
- Turn the ring and dial or press the ▲▼◀▶ buttons to adjust the level of correction.
- To reset the correction level, press the MENU button.
- Press the DISP. button to complete the setting.

- B stands for blue, A for amber, M for magenta, and G for green.
- Even if you change the white balance setting in Step 1 on p. 82 after making adjustments in the correction level, those adjustments will be retained. However, the adjustments will be reset if custom white balance data is recorded.
- You can also display the B and A adjustment screen just by turning the ring (p. 101).
- One level of the blue/amber correction is equivalent to 7 mireds of a color temperature conversion filter. (Mired: Measuring unit indicating the density of a color temperature conversion filter.)

Continuous Shooting

As long as you hold the shutter button down, the camera will shoot continuously.

1 Choose a Drive mode.

- After pressing the (FUNC. SET) button, press the ▲▼ buttons to choose □.

2 Choose an option.

- Press the ◀▶ buttons or turn the ● dial to choose ❑ or AF❑, then press the (FUNC. SET) button.

3 Shoot.

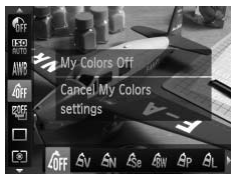
▶ As long as you hold the shutter button down, the camera will shoot successive images.

Mode	Maximum Speed (Approx. images/sec.)	Description
❑ Continuous	1.9	The camera shoots continuously with the focus and exposure set when the shutter button is pressed halfway.
AF❑ Continuous Shooting AF	0.7	The camera shoots continuously and focuses. The [AF Frame] is set to [Center].
LV❑ Continuous Shooting LV*	0.8	The camera shoots continuously with the focus fixed to the position set in manual focus. In ❄ mode, the focus is locked on the first shot.

* When in ❄ (p. 63), AF lock (p. 90) or manual focus modes (p. 93), AF❑ will change to LV❑.

- Cannot be used with the self-timer (p. 59).
- Continuous shooting speed increases in ☀ mode (p. 60).
- Depending on the shooting conditions, the camera settings and the zoom position, the camera may stop shooting momentarily, or the shooting speed may slow down.
- As the number of images increases, the shooting speed may slow down.
- If the flash fires, the shooting speed may slow down.

Changing the Tone of an Image (My Colors)

You can change the tone of an image to sepia or black and white when shooting.

1 Choose My Colors.

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose OFF.

2 Choose an option.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the FUNC./SET button.
- ▶ The setting will appear on the screen.

My Colors Off	—
Vivid	Emphasizes the contrast and color saturation for a vivid impression.
Neutral	Tones down the contrast and color saturation for neutral hues.
Sepia	Sepia tones.
B/W	Black and white.
Positive Film	Combines the effects of Vivid Red, Vivid Green and Vivid Blue to produce intense natural appearing colors like those obtained with positive film.
Lighter Skin Tone	Makes skin tones lighter.
Darker Skin Tone	Makes skin tones darker.
Vivid Blue	Emphasizes blue tints. Makes the sky, ocean and other blue subjects more vivid.
Vivid Green	Emphasizes green tints. Makes mountains, foliage and other green subjects more vivid.
Vivid Red	Emphasizes red tints. Makes red subjects more vivid.
Custom Color	You can adjust contrast, sharpness, and color saturation etc. to your preference (p. 86).

- Not available when shooting in RAW or RAW+JPEG.
- The white balance cannot be set in the Se and BW modes (p. 82).
- In L and D modes, colors other than people's skin color may change. You may not obtain the expected results with some skin colors.

Custom Color

The contrast, sharpness, color saturation, red, green, blue, and skin tones in an image can be chosen and set at 5 different levels.

- Follow Step 2 on p. 85 to choose ₐC, then press the DISP. button.
- Press the ▲▼ buttons to choose an option, then press the ◀▶ buttons or turn the dial to choose a value.
- The more to the right, the stronger/darker (skin tone) the effect gets, the more to the left, the weaker/lighter (skin tone) the effect gets.
- Press the DISP. button to complete the setting.

Changing the Composition with the Focus Lock

While you keep the shutter button pressed halfway, the focus and exposure are locked. You can now recompose and shoot. This is called Focus Lock.

1 Focus.

- Center the subject you want in focus, and press the shutter button halfway.
- Confirm that the AF Frame on the subject is green.

2 Recompose.

- Keep the shutter button pressed halfway and move the camera to recompose the scene.

3 Shoot.

- Press the shutter button fully.

5

Getting More Out of Your Camera

This chapter serves as the advanced version of Chapter 4 and explains how to take pictures using various functions.

- This chapter assumes that you have set the mode dial to **P**.
- The sections “Setting the Shutter Speed” (p. 98), “Setting the Aperture Value” (p. 99), “Setting the Shutter Speed and Aperture Value” (p. 100), assume that you have set the mode dial to the corresponding mode.
- The section “Adjusting the Flash Output” (p. 107) assumes that you have set the mode dial to **M**.
- The sections “Changing the Color and Shooting” (p. 109) and “Shooting Stitch Assist Images” (p. 112) assume that you have set the mode dial to **SCN** and chosen the corresponding mode.
- Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 182 – 185).

Changing the AF Frame Mode

You can change the AF (Auto Focus) frame mode to match the scene you want to shoot.

Choose [AF Frame].

- After pressing the MENU button, choose [AF Frame] in the 📷 tab, then press the ◀▶ buttons to choose an option.

Center

The AF frame is locked to the center. This is effective for focusing on a specific point.

You can reduce the AF frame size

- Press the MENU button to choose [AF Frame Size] in the 📷 tab, then choose [Small].
- The AF frame is set to [Normal] when using Digital Zoom (p. 55), Digital Tele-converter (p. 56), or Manual Focus (p. 93).

If the camera cannot focus when you press the shutter button halfway, the AF frame will turn yellow and ❗ will appear.

Face AiAF

- Detects people's faces and sets the focus, exposure (evaluative metering only) and white balance (AWB only).
- When the camera is pointed at subjects, a white frame appears on the face the camera judges to be the main subject, and gray frames (max. 2) will appear on other faces.
- A frame will follow a moving subject within a certain range.
- When the shutter button is pressed halfway, up to 9 green frames will appear on faces that the camera focuses on.

- If a face is not detected and only gray frames (no white frame) appear, up to 9 green frames will appear on the areas the camera focuses on when the shutter button is pressed halfway.
- The AF frame will appear in the center of the screen if you press the shutter button halfway when Servo AF (p. 94) is set to [On] and a face is not detected.

- Examples of faces that cannot be detected:
  - Subjects that are far away or extremely close.
  - Subjects that are dark or light.
  - Faces turned to the side or at a diagonal, or faces with a portion hidden.
- The camera may mistakenly identify non-human subjects as a face.
- If the camera cannot focus when you press the shutter button halfway, the AF frame will not appear.

Tracking AF

You can choose the subject you want to focus on and shoot.

Choosing the Subject to Focus On (Tracking AF)

You can choose the subject you want to focus on and shoot.

1 Choose [Tracking AF].

- Press the MENU button to choose [AF Frame] in the camera tab, then press the ◀▶ buttons to choose [Tracking AF].
- ▶ The tracking frame will appear in the center of the screen.

2 Choose the subject to focus on.

- Point the camera so that the tracking frame is on the subject you want to focus on and press the ◀ button.

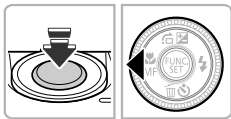
- ▶ The camera will beep and the frame will appear when a subject is detected. The camera will continue to track the subject within a certain range even if the subject moves.
- If the camera does not detect the subject, the tracking frame will appear on the screen.
- To cancel tracking, the ◀ button again.

Shoot.

- Press the shutter button halfway. ⌜ ⌝ will change into a blue □ which will follow the subject while the camera continues to adjust the focus and exposure.
- Press the shutter button fully to shoot.
- ▶ Even after shooting completes, ⌜ ⌝ will appear, and the camera will continue to track the subject.

- The camera will detect a subject even if you press the shutter button half way without pressing the ◀ button. When shooting completes, ⌖ will appear in the center of the screen.
- Servo AF (p. 94) is set to [On].
- The camera may not be able to track the subject if the subject is too small, moves too quickly or if the contrast between the subject and the background is too low.
- When shooting in MF (p. 93), press the ◀ button for 1 second or longer.
- Not available in 🌷.

Shooting with the AF Lock

The focus can be locked. After locking the focus, the focal distance will not change even when you release your finger from the shutter button.

1 Lock the focus.

- Keep the shutter button pressed halfway and press the ◀ button.
- ▶ The focus locks, and MF and the MF indicator appear on the screen.
- After you release your finger from the shutter button, press the ◀ button again, then press the ◀▶ buttons or turn the dial to choose ▲. MF and the MF indicator will disappear and MF will unlock.

Compose the scene and shoot.

Magnifying the Focal Point

If you press the shutter button halfway, the AF frame will magnify and you can check the focus.

1 Choose [AF-Point Zoom].

- Press the MENU button to choose [AF-Point Zoom] in the camera tab, then press the ◀▶ buttons to choose [On].

2 Check the focus.

- Press the shutter button halfway.
- ▶ In [Face AiAF] (p. 88), the face detected as the main subject will appear magnified.
- ▶ In [Center] (p. 88), the contents of the center AF frame will appear magnified.

What if the display does not magnify?

The display will not appear magnified in [Face AiAF] if a face cannot be detected or is too big in relation to the screen. In [Center], it will not appear magnified if the camera cannot focus.

The magnified display will not appear when using Digital Zoom (p. 55), Digital Tele-converter (p. 56), Tracking AF (p. 89), Servo AF (p. 94) or when connected to a TV (p. 81).

Choosing the Person to Focus On (Face Select)

You can choose a specific person's face to focus on and then shoot.

1 Register to the button (p. 166).

2 Enter Face Select mode.

- Point the camera toward the face of the subject and press the button.
- After [Face Select : On] appears, a face frame will appear around the face detected as the main subject.
- Even if the subject moves, the face frame will follow the subject within a certain range.
- If a face is not detected, will not appear.

3 Choose the face to focus on.

- If you press the button, the face frame will move to another face detected by the camera.
- When the frame has made a full circuit of all detected faces, [Face Select: Off] will appear, and the AF frame mode screen will reappear.

4 Shoot.

- Press the shutter button halfway. When the camera focuses, will change into .
- Press the shutter button fully to shoot.

Shooting in Manual Focus Mode

You can use manual focus when auto focus is not possible. If you press the shutter button halfway after roughly focusing manually, you can fine tune the focus.

1 Choose MF.

- After pressing the ◀ button, press the ◀▶ buttons or turn the ● dial to choose MF, then press the FUNC. SET button.
- ▶ MF and the MF indicator appear.

MF Distance Indicator

2 Focusing roughly.

- The side bar shows your focal point and an MF distance indicator. While looking at the magnified area, turn the ● dial to find an approximate focus.

3 Fine tuning the focus.

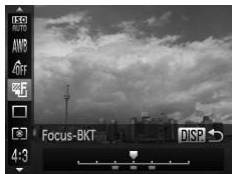
- If you press the shutter button halfway, you can fine tune the focus (Safety MF).

- You can also focus using the () ring (p. 101).
- You cannot change the AF frame mode or size while focusing manually (p. 88). If you want to change the AF frame mode or size, cancel Manual focus mode first.
- In order to focus accurately, try attaching the camera to a tripod.
- When using the Digital Zoom (p. 55), Digital Tele-converter (p. 56), or when using a television as a display (p. 81), you will be able to focus but the magnified area will not display.
- If you press the MENU button and [MF-Point Zoom] is set to [Off] in the 📷 tab, the magnified display will not be available.
- If you press the MENU button to display the 📷 tab and set [Safety MF] to [Off], you will not be able to fine tune the focus even if you press the shutter button halfway.

Focus Bracketing (Focus-BKT Mode)

The camera automatically takes three continuous shots in the following order: one at the position set in manual focus, and one each with focus positions preset farther and nearer. The focus adjustment can be set in 3 levels.

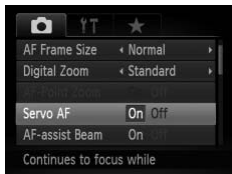
1 Choose .

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose , then press the ◀▶ buttons or turn the dial to choose .

2 Set the focus.

- Press the DISP. button.
- Press the ◀▶ buttons or turn the dial to make the setting.

- In flash settings other than (p. 54), Focus Bracketing is not available.
- Continuous shooting (p. 84) cannot be used in this mode.
- If you follow Step 1 on p. 93 to choose MF and immediately press the DISP. button, the focus bracketing screen will appear.
- Only three shots will be taken, even if you use (p. 59) to set a different number of shots.

Shooting with Servo AF

While the shutter button is pressed halfway, the focus and exposure will continue to adjust, allowing you to take pictures of moving subjects without missing a shot.

1 Choose [Servo AF].

- Press the MENU button to choose [Servo AF] in the tab, then press the ◀▶ buttons to choose [On].

Focus.

- The focus and exposure will be maintained where the blue AF frame appears while you press the shutter button halfway.

- The camera may not be able to focus in some conditions.
- In low light conditions, AF frames may not turn blue even after pressing the shutter button halfway. In this case, you can set the focus and exposure with the AF frame setting.
- If a correct exposure cannot be obtained, the shutter speed and aperture value appear in orange. Release your finger from the shutter button, then press it again halfway.
- You cannot shoot with the AF lock in this mode.
- The [AF-Point Zoom] option in the 📷 tab is not available in Servo AF mode.
- Not available when using Self-Timer (p. 59).

Changing the Metering Method

You can change the metering method (brightness measuring function) to match the shooting conditions.

1 Choose the metering method.

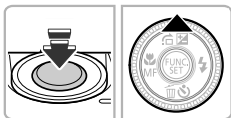
- After pressing the (FUNC./SET) button, press the ▲▼ buttons to choose [⊙].

2 Choose an option.

- Press the ◀▶ buttons or turn the ● dial to choose an option, then press the (FUNC./SET) button.
- ▶ The setting will appear on the screen.

[⊙] Evaluative	Suitable for standard shooting conditions, including back lit shots. Automatically adjusts the exposure to match the shooting conditions.
[ ] Center Weighted Avg.	Averages the light metered from the entire frame, but gives greater weight to the center.
[•] Spot	Only meters within the [ ] (Spot AE Point frame) that appears at the center of the screen.

Shooting with the AE Lock

You can lock the exposure and shoot, or set the focus and exposure separately to shoot. AE stands for "Auto Exposure".

1 Lock the exposure.

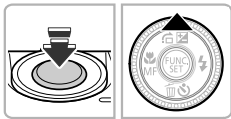
- Point the camera toward the subject and press the ▲ button while pressing the shutter button halfway.
- ▶ When ✱ appears, the exposure will be locked.
- If you release your finger from the shutter button and press the ▲ button again, ✱ will disappear and AE will unlock.

2 Compose the scene and shoot.

Program Shift

If you lock the exposure and turn the ● dial, you can change the shutter speed and aperture value combination.

Shooting with the FE Lock

Just as with the AE lock, you can lock the exposure for shooting with the flash. FE stands for "Flash Exposure".

1 Choose ⚡ (p. 75).

2 Lock the flash exposure.

- Point the camera toward the subject and press the ▲ button while pressing the shutter button halfway.
- ▶ The flash will fire and when ✱ appears, the flash output will be retained.
- If you release your finger from the shutter button and press the ▲ button again, ✱ will disappear and FE will unlock.

3 Compose the scene and shoot.

Auto Exposure Bracketing (AEB Mode)

The camera takes 3 continuous shots while automatically adjusting the exposure to standard exposure, underexposure and overexposure, in that order.

1 Choose .

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose the bracketing menu item, then press the ◀▶ buttons or turn the dial to choose the AEB icon.

2 Set the exposure compensation amount.

- Press the DISP. button.
- Press the ◀▶ buttons or turn the dial to adjust the setting.
- From the exposure set by the camera, you can adjust the amount of compensation ±2 stops in 1/3-stop increments. If exposure compensation (p. 74) is already being used, settings are made with the compensated value as the base.

- In flash settings other than the flash off setting (p. 54), AEB is not available.
- Continuous shooting (p. 84) cannot be used in this mode.
- If you press the DISP. button while in the exposure compensation screen (p. 74), the compensation amount setting screen will appear.
- Only three shot will be taken, even if you use the self-timer (p. 59) to set a different number of shots.

Setting the Shutter Speed

You can set the shutter to the speed at which you want to shoot. The camera will set the appropriate aperture value for the shutter speed you set.
Tv stands for "Time value".

1 Set the mode dial to Tv.

2 Make the setting.

- Turn the ring to set the shutter speed.

3 Shoot.

Available Shutter Speeds

15", 13", 10", 8", 6", 5", 4", 3"2, 2"5, 2", 1"6, 1"3, 1", 0"8, 0"6, 0"5, 0"4, 0"3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/13, 1/15, 1/20, 1/25, 1/30, 1/40, 1/50, 1/60, 1/80, 1/100, 1/125, 1/160, 1/200, 1/250, 1/320, 1/400, 1/500, 1/640, 1/800, 1/1000, 1/1250, 1/1600

- 2" indicates 2 seconds, 0"3 indicates 0.3 second and 1/160 indicates 1/160 second.

- When shutter speeds of 1.3 seconds or slower are used, images are processed to eliminate noise after being taken. A certain amount of processing time may be needed before you can take the next shot.
- You should set the [IS Mode] to [Off] when lowering the shutter speed and shoot with a tripod (p. 165).

What if the aperture value appears in orange?

If the aperture value appears in orange when the shutter button is pressed halfway, the scene has exceeded the correct exposure limits. Adjust the shutter speed until the aperture value appears in white. Safety shift can also be used (p. 99).

Setting the Aperture Value

You can set the aperture to a value at which you want to shoot. The camera will set the appropriate shutter speed for the aperture value you set.
Av stands for “Aperture value”, which refers to the size of the aperture opening inside the lens.

1 Set the mode dial to Av.

2 Make the setting.

- Turn the ring to set the aperture value.

3 Shoot.

Available Aperture Values

F2.0, F2.2, F2.5, F2.8, F3.2, F3.5, F4.0, F4.5, F4.9, F5.0, F5.6, F6.3, F7.1, F8.0

- Depending on the zoom position, some aperture values may not be available.

What if the shutter speed appears in orange?

If the shutter speed appears in orange when the shutter button is pressed halfway, the scene has exceeded the correct exposure limits. Adjust the aperture value until the shutter speed appears in white. Safety shift can also be used.

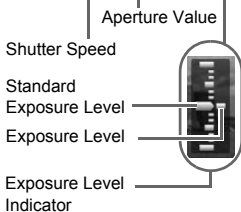
Safety Shift

With Tv and Av modes, if you press the MENU button and [Safety Shift] is set to [On] in the tab, the shutter speed or aperture value is automatically adjusted for the correct exposure when it cannot otherwise be obtained.
Safety Shift is disabled when the flash is enabled.

Setting the Shutter Speed and Aperture Value

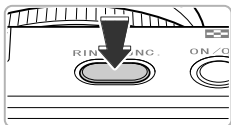
You can manually set the shutter speed and aperture to shoot images. **M** stands for "Manual".

Set the mode dial to M.

Make the setting.

- Turn the dial to set the shutter speed, or turn the () ring to set the aperture value.
- The set exposure level appears on the indicator. You can check the difference against the standard exposure level.
- When the difference is more than ±2 stops, the set exposure level appears in orange. When you press the shutter button halfway, "-2" or "+2" appears in orange.

- The standard exposure is calculated according to the metering method chosen (p. 95).
- If you use the zoom after making settings or changing the composition, the exposure level may change.
- Depending on the shutter speed or aperture value set, the screen brightness may change. If the flash mode is set to ϟ, the screen brightness will not change.
- If you press the o button while holding down the shutter button halfway, the shutter speed and aperture value will automatically adjust to obtain the correct exposure (the correct exposure may not be obtained depending on the settings).

Making Settings using the Control Ring

You can change the function assigned to the control ring. By performing operations with the control ring, you can enjoy the feeling of using a fully manual camera.

1 Assign a function to the ring.

- Press the ring function selector button.

- Press the ring function selector button, the ◀▶ buttons, or turn the ring or dial to choose an option.
- Press the (FUNC./SET) button to make the setting.

2 Adjust the settings.

- Turn the ring or the dial to adjust the settings of the assigned functions.
- You can switch between the two functions assigned to the dial (p. 102), such as the aperture value and shutter speed when ISO is selected, by pressing the ▲ button.

Functions Assignable to the Control Ring

The functions you can assign to the control ring are different depending on the shooting mode. The functions assigned to the control dial also change.

Assignable Function \ Shooting mode		M	Av	Tv	P
STD	()	Av	Av	Tv	ISO
	●	Tv	+/-	+/-	+/-
ISO	()	ISO	ISO	ISO	ISO
	●	Av, Tv	Av, +/-	Tv, +/-	+/-
+/-	()	Tv	+/-	+/-	+/-
	●	Av	Av	Tv	ISO
MF	()	MF	MF	MF	MF
	●	Av, Tv	Av, +/-	Tv, +/-	+/-
WB +/-	()	You can correct the white balance (p. 82).			
ZOOM	()	You can zoom using Step Zoom (p. 57).			
Ci	()	You can set i-Contrast (p. 104).			
[↔]	()	You can change the aspect ratio (p. 79).			
C	—	You can assign the functions you want (p. 103).			

- Av: aperture value (p.99), Tv: shutter speed (p. 98), ISO: ISO speed (p. 80), +/-: exposure compensation (p. 74), MF: manual focus (p. 93).
- With WB +/-, ZOOM, Ci and [↔], the functions assignable to the ● dial are the same as with ISO.

- When ⃠ appears on the bottom right of an icon, the function cannot be used in the current Shooting mode or function setting.
- When shooting in AUTO, SCN (except), , and movie modes, the () ring is used for step zoom (p. 57).

Registering Functions to the Control Ring

You can register which functions will be assigned to the control ring for each Shooting mode.

1 Choose C.

- Follow Step 1 on p. 101 to choose C, then press the MENU button.

2 Make the setting.

- Press the ◀▶ buttons or turn the dial to choose a Shooting mode to set.
- Press the ▲▼ buttons or turn the ring to choose a function to register to the control ring.
- ▶ The function assigned to the control dial will be changed.
- Press the FUNC./SET button to make the setting.

Correcting the Brightness and Shooting (i-Contrast)

The camera can detect areas in the scene, such as faces or backgrounds, that are too bright or dark and automatically adjust them to the optimum brightness when shooting.
To suppress highlight blowout, Dynamic Range Correction is used. To bring out shadow details, Shadow Correct is used.

- Under some conditions, the image may appear coarse or may not be corrected properly.
- You can correct recorded images (p. 145).
- You can also set the camera so that turning the ring changes the DR Correction or Shadow Correct settings (p. 101).
- Not available in RAW or RAW+JPEG mode.

Dynamic Range Correction (DR Correction)

You can choose from the following Dynamic Range Correction methods: AUTO, 200% and 400%.

1 Choose .

- After pressing the FUNC./SET button, press the ▲▼ buttons to choose .

2 Make the setting.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the FUNC./SET button.
- ▶ Once set, will appear on the screen.

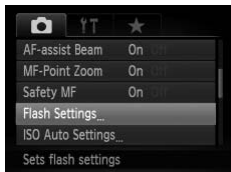
- AUTO is only available in ISO AUTO (p. 80).
- With 200% and 400%, the ISO speed will return to ISO 1600 even if you set a speed higher than ISO 1600.
- With 200%, the ISO speed will return to ISO 160 even if you set a speed lower than ISO 160.
- With 400%, the ISO speed will return to ISO 320 even if you set a speed lower than ISO 320.

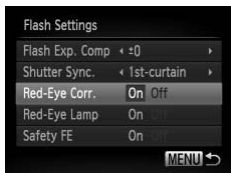
Shadow Correct

Choose [AUTO].

- Follow Step 1 on p. 104 to choose [OFF], then press the DISP. button.
- Press the ◀▶ buttons or turn the dial to choose [AUTO], then press the FUNC. SET button.
- ▶ Once set, [icon] will appear on the screen.

Red-Eye Correction

You can automatically correct red-eye that occurs in images taken with the flash.

1 Choose [Flash Settings].

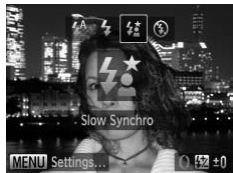
- Press the MENU button to choose [Flash Settings] in the [camera] tab, then press the FUNC. SET button.

2 Adjust the setting.

- Press the ▲▼ buttons or turn the dial to choose [Red-Eye Corr.], then press the ◀▶ buttons to choose [On].
- ▶ Once set, [icon] will appear on the screen.

Red-eye correction may be applied to areas other than red eyes. For example, when red make-up has been used around eyes.

- You can correct recorded images (p. 146).
- You can also display the screen in Step 2 by pressing the ▶ button, then the MENU button.
- Not available when shooting in RAW or RAW+JPEG.

Shooting with Slow Synchro

You can make the main subject, such as people, appear bright by having the camera provide the appropriate illumination with the flash. At the same time, you can use a slow shutter speed to brighten the background that the light from the flash cannot reach.

1 Choose ⚡.

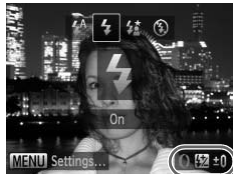
- After pressing the ▶ button, press the ◀▶ buttons or turn the ● dial to choose ⚡, then press the FUNC./SET button.
- ▶ Once set, ⚡ will appear on the screen.

2 Shoot.

- Even if the flash fires, ensure that the subject does not move until the shutter sound ends.

Attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you should set the [IS Mode] to [Off] when shooting with a tripod (p. 165).

Adjusting the Flash Exposure Compensation

Just like with Exposure Compensation (p. 74), you can adjust the exposure ±2 stops in 1/3-stop increments when using the flash.

Select the compensation amount.

- After pressing the ▶ button, immediately turn the () ring and select the compensation amount, then press the FUNC./SET button.
- ▶ Once set, ⚡ will appear on the screen.

Safety FE

The camera automatically changes the shutter speed or aperture value when the flash fires to avoid overexposing and blowing out the highlights in the scene. However, if you press the MENU button to display the 📷 tab and set [Safety FE] to [Off] in [Flash Settings], the shutter speed and aperture value will not automatically adjust.

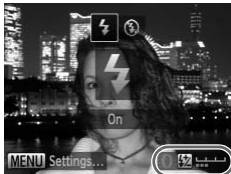
- You can also set the flash exposure compensation. Press the MENU button and choose [Flash Settings] in the camera tab. Then choose [Flash Exp. Comp] and press the ◀▶ buttons to choose a setting.
- If you press the ▶ button and immediately press the MENU button, the setting screen will appear.

Adjusting the Flash Output

In M mode, you can choose 3 levels of flash output.

1 Set the mode dial to M.

2 Choose the level of flash output.

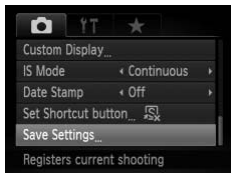
- After pressing the ▶ button, immediately turn the ring and select the level of output, then press the FUNC. SET button.
- Once set, the flash output icon will appear on the screen.

- You can also set the flash output level. Press the MENU button and choose [Flash Settings] in the camera tab. Then choose [Flash Output] and press the ◀▶ buttons to choose a setting.
- In Tv and Av modes, you can set the flash output if you press the MENU button and choose the camera tab, then [Flash Settings] and set the [Flash Mode] option to [Manual].
- If you press the ▶ button and immediately press the MENU button, the setting screen in will appear.

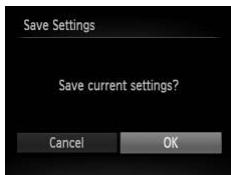
Registering Shooting Settings

You can register commonly used shooting modes and settings to your preference. To switch between registered settings, simply turn the mode dial to C. Even if you switch shooting modes or turn off the power, settings that usually cancel (self timer, etc.) will be saved.

Settings that Can be Registered

- Shooting modes (P, Tv, Av and M)
- Items set in P, Tv, Av or M (pp. 74 – 100)
- Items in the shooting menu
- Zoom position
- Manual focus position (p. 93)
- My Menu items (p. 167)

1 Enter the shooting mode you want to register and make the settings.

2 Choose [Save Settings].

- Press the MENU button, choose [Save Settings] in the camera tab, then press the FUNC./SET button.

3 Register the settings.

- Press the ◀▶ buttons or turn the control dial to choose [OK], then press the FUNC./SET button.

- To change part of the pre-registered settings (except the shooting mode), choose C and changes the settings, then repeat Steps 2-3. These settings will not be reflected in other Shooting modes.
- To return contents registered to C to the default settings, turn the mode dial to C, then choose [Reset All] (p. 50).

Changing the Color and Shooting

You can change the look of an image when shooting. However, depending on shooting conditions the image may become coarse, or the colors may not come out as expected.

Color Accent

You can choose to retain a single color and change the rest to black and white in a composition.

1 Choose $\nearrow$A.

- Follow Steps 1 – 2 on p. 61 to choose $\nearrow$A.

2 Press the DISP. button.

- ▶ The unchanged image and the Color Swap image will alternately display.
- The color for default settings is green.

Recorded color

3 Specify the color.

- Position the center frame so it is filled with the color you want and press the ◀ button.
- ▶ The specified color will be recorded.

4 Specify the range of colors.

- Press the ▲▼ buttons or turn the ● dial to change the range of colors to be retained.
- Choose a negative value to limit the range of colors. Choose a positive value to extend the range of colors to similar colors.
- Pressing the DISP. button restores the shooting screen.

Using the flash may cause unexpected results in this mode.

Color Swap

You can swap one color in an image for another when recording it. You can only swap one color.

1 Choose ✎S.

- Follow Steps 1 – 2 on p. 61 to choose ✎S.

2 Press the DISP. button.

- ▶ The unchanged image and the Color Swap image will alternately display.
- The default setting is to change green to gray.

3 Specify the color to be swapped.

- Position the center frame so it is filled with the color you want and press the ◀ button.
- ▶ The specified color will be recorded.

4 Specify the target color.

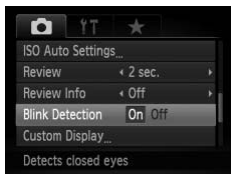
- Position the center frame so it is filled with the color you want and press the ▶ button.
- ▶ The specified color will be recorded.

5 Specify the range of colors to be swapped.

- Press the ▲▼ buttons or turn the dial to adjust the range of colors to be changed.
- Choose a negative value to limit the range of colors. Choose a positive value to extend the range of colors to similar colors.
- Press the DISP. button to restore the shooting screen.

- Using the flash may cause unexpected results in this mode.
- Under some conditions, the image may appear coarse.

Checking for Shut Eyes

When the camera detects the possibility that people have their eyes shut, appears.

1 Choose [Blink Detection].

- Press the MENU button, then choose [Blink Detection] in the tab. Press the ◀▶ buttons to choose [On].

2 Shoot.

- When a person with shut eyes is detected, a frame and appear.

- In or mode, when the number of shots is set to two or more, this function is only available for the last image shot.
- In and mode, this function is only available for the last image shot.
- Not available in , , or mode.

Shooting Stitch Assist Images

Large subjects can be split into several shots that can later be merged together using the included software on a computer to create a panoramic image.

Choose or .

- Follow Steps 1 – 2 on p. 61 to choose or .

2 Take the first shot.

- The exposure and white balance will be set with the first shot.

3 Take subsequent shots.

- Overlap part of the first shot when taking the second shot.
- Minor discrepancies in the overlapping portions will be corrected when the images are merged.
- Up to 26 shots can be recorded with the same procedures.

Finish shooting.

- Press the (FUNC/SET) button.

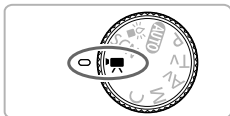
5 Merge the images on a computer.

- For details on how to merge the images, refer to the *Software Guide*.

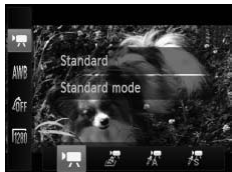
- This function is not available when a TV is used as the monitor (p. 81).
- To use AF lock, register AFL to the button (p. 166).

6

Using Various Functions for Shooting Movies

This chapter serves as a more advanced version of the “Shooting Movies” and “Viewing Movies” sections in Chapter 1, and explains how to use various functions for shooting and viewing movies.

- This chapter assumes that the mode dial has been set to 🎥 mode.
- The latter half of the chapter explaining movie playback and editing assumes that the ▶ button has been pressed to enter Playback mode.

Changing the Movie Mode

You can choose between four Movie modes.

Choose a Movie mode.

- After pressing the FUNC./SET button, press the ▲▼ buttons or turn the dial to choose the Movie mode icon.
- Press the ◀▶ buttons or turn the dial to choose a mode, then press the FUNC./SET button.

Mode	Description
Standard	Normal mode.
Miniature Effect	You can shoot movies that look like a miniature model.
Color Accent	These Shooting modes let you change all colors except the chosen color to black and white, or exchange the chosen color for another color, when shooting. See “Changing the Color and Shooting” (p. 109) for details. You need to choose the color you wish to leave in or change before shooting the movie.
Color Swap	

Under some conditions, colors may not turn out as expected in Color Accent and Color Swap modes.

Shoot Movies That Look Like a Miniature Model (Miniature Effect)

You can shoot movies that look like moving miniature models.
You create the miniature model effect by choosing the upper and lower portions of the scene that will be blurred and the playback speed, which makes people and objects in the scene move quickly during playback. Audio will not be recorded.

Choose the Miniature Effect mode.

- Follow the steps above to choose the Miniature Effect mode.
- ▶ A white frame (the area that will not be blurred) appears on the screen.

2 Choose the area to keep in focus.

- Press the DISP. button.
- Move the zoom lever to change the frame size, and press the ▲▼ buttons to change the frame position.

3 Choose a playback speed.

- Press the MENU button.
- Press the ◀▶ buttons or turn the dial to choose a playback speed.
- Press the MENU button restore the shooting screen.

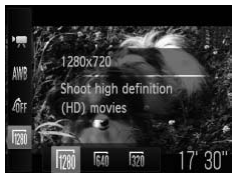
4 Shoot.

Playback Speeds and Estimated Playback Times (for 1 Min. Clips)

Speed	Playback Time
5x	12 sec.
10x	6 sec.
20x	3 sec.

- If you press the FUNC./SET button in Step 2, the horizontal/vertical orientation of the frame will switch, and you can use the ◀▶ buttons to change the frame position when it is displayed vertically.
- Holding the camera vertically will change the orientation of the frame.
- Since you may not achieve the expected results depending on the shooting conditions, try taking some test shots first.

Changing the Image Quality

You can choose between three image quality settings.

1 Choose the image quality setting.

- After pressing the (FUNC. SET) button, press the ▲▼ buttons to choose 1280.

2 Choose an option.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the (FUNC. SET) button.
- ▶ The option you set will appear on the screen.

Image Quality Table

Image Quality (Recording Pixels/Frame Rate)	Content
1280 1280 x 720 pixels, 24 frames/sec.*	For shooting high-definition movies.
640 640 x 480 pixels, 30 frames/sec.	For shooting standard quality movies.
320 320 x 240 pixels, 30 frames/sec.	Since the number of recording pixels is smaller than in 640, the image quality will appear coarse, but you can record approximately three times the length.

* movies play back at 30 fps.

Estimated Shooting Time

Card Capacity / Image Quality	4 GB	16 GB
1280	25 min. 8 sec.	1 hr. 42 min. 57 sec.
640	43 min. 43 sec.	2 hrs. 59 min. 3 sec.
320	1 hr. 58 min. 19 sec.	8 hrs. 4 min. 30 sec.

- Based on Canon's testing standards.
- Recording will automatically stop when the clip file size reaches 4 GB, or when the recording time reaches 29 minutes and 59 seconds when shooting in 1280, and approximately 1 hour when shooting in 640 or 320.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.

AE Lock/Exposure Shift

You can lock the exposure or change it in 1/3 steps within a range of ±2 before shooting.

1 Focus.

- Press the shutter button halfway to focus.

2 Lock the exposure.

- After releasing the shutter button, press the ▲ button to lock the exposure. The exposure shift bar appears.
- Press the ▲ button again to release the lock.

3 Change the exposure.

- While watching the screen, turn the ● dial to adjust the exposure.

4 Shoot.

Using the Wind Filter

Wind Filter suppresses noise when the wind is strong. However, unnatural sound may result when used to record in locations with no wind.

- Press the MENU button to choose [Wind Filter] from the 📷 tab, then press the ◀▶ buttons to choose [On].

Other Shooting Functions

The following functions can be used in the same way as for still images. Functions marked with a * can be used in the same way as for still images when in , or .

- **Zooming in More Closely on Subjects**
  - The optical zoom is not available while shooting.
  - The sound of zoom operations will be recorded.
  - The digital zoom (p. 55) is available in .
  - The digital zoom is not available in , , or . Be sure to set the optical zoom before shooting.
- **Shoot Using Preset Focal Lengths (Step Zoom) (p. 57)**
- **Using the Self-Timer (p. 59)***
  The number of shots cannot be changed.
- **Changing the Focusing Range (Macro) (p. 75)***
  Macro shooting is not available in .
- **Shooting Using a TV Monitor (p. 81)***
- **Adjusting the White Balance (p. 82)**
  White balance correction is not available.
- **Changing the Tone of an Image (My Colors) (p. 85)**
- **Shooting with the AF Lock (p. 90)***
- **Shooting in Manual Focus Mode (p. 93)***
- **Turning Off the AF Assist Beam (p. 162)***
- **Customizing Display Information (p. 164)***
- **Changing the IS-Mode Settings (p. 165)***
  You can switch between [Continuous] and [Off].
- **Registering Functions to the S Button (p. 166)***

Playback Functions

The following functions can be used in the same way as for still images.

- **Erasing Images (p. 28)**
- **Quickly Searching Images (p. 122)**
- **Viewing Images in Filtered Playback (p. 123)**
- **Viewing Slideshows (p. 125)**
- **Changing Image Transitions (p. 128)**
- **Viewing Images on a TV (p. 129)**
- **Viewing Images on a High-Definition TV (p. 130)**
- **Protecting Images (p. 132)**
- **Erasing Images (p. 136)**
- **Tagging Images as Favorites (p. 138)**
- **Organizing Images by Category (My Category) (p. 139)**
- **Rotating Images (p. 141)**

Summary of Movie Control Panel in “Viewing Movies” (p. 31)

	Exit
	Playback
	Slow motion playback (you can use the ◀▶ buttons or turn the ● dial to adjust the speed. Sound will not play back.)
	Display the first frame
	Previous frame (Rewind if you hold down the FUNC/SET button.)
	Next frame (Fast forward if you hold down the FUNC/SET button.)
	Display the last frame
	Edit
	Appears when connected to a PictBridge compliant printer (p. 148). Refer to the *Personal Printing Guide* for details.

Editing

You can trim the beginnings and ends of recorded movies.

Movie Editing Panel

Movie Editing Bar

1 Choose ✂.

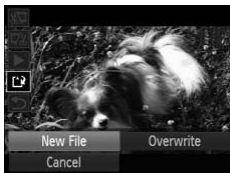
- Follow Steps 1 – 3 on p. 31 to choose ✂, then press the FUNC/SET button.
- ▶ The movie editing panel and the movie editing bar will appear.

2 Set the editing range.

- Press the ▲▼ buttons and choose ✂ or ✂.
- Press the ◀▶ buttons or turn the ● dial to move ▮. ✂ will display at a point where you can edit the movie. If you choose ✂, you can trim the beginning of the movie from ✂. If you choose ✂, you can trim the end of the movie from ✂.

- Even if you move ▮ to a point other than a ✂, only the portion from the nearest ✂ to the left will be trimmed when ✂ is chosen. Only the portion from the nearest ✂ to the right will be trimmed when ✂ is chosen.
- The section indicated with ▮ will be the section of the movie that remains after editing.

3 Check the edited movie.

- Press the ▲▼ buttons to choose ▶ (Play), then press the (FUNC. SET) button. The edited movie will play.
- To edit the movie again, repeat Step 2.
- To cancel editing, press the ▲▼ buttons, and choose ↩. After pressing the (FUNC. SET) button, press the ◀▶ buttons or turn the ● dial to choose [OK], then press the (FUNC. SET) button again.

4 Save the edited movie.

- Press the ▲▼ buttons to choose ↲, then press the (FUNC. SET) button.
- Press the ▲▼◀▶ buttons, or turn the ● dial to choose [New File], then press the (FUNC. SET) button.
- The movie will be saved as a new file.

- When [Overwrite] is chosen in Step 4, the unedited movie is overwritten with the edited movie, erasing the original.
- When there is not enough space left on the memory card, only [Overwrite] can be chosen.
- If the battery is depleted partway through editing, the edited movie clips may not be saved.
- When editing movies, you should use a fully charged battery, or an AC adapter kit (sold separately) (p. 38).

7

Using Various Playback and Editing Functions

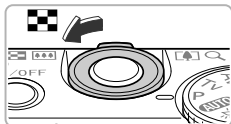
This chapter explains various ways to play back and edit images.

- Press the ▶ button to enter Playback mode before operating the camera.

- It may not be possible to play back or edit images that have been edited on a computer, had their file name changed, or have been taken on a different camera.
- The edit function (pp. 142 – 146) cannot be used if the memory card does not have free space available.

Quickly Searching Images

Searching Images Using Index Display

Displaying multiple images at the same time lets you quickly find the image you want.

1 Move the zoom lever toward .

▶ Images will display in an index.

● The number of images increases each time you move the lever toward ▦.

● The number of images decreases each time you move the lever toward Q.

2 Choose an image.

● Turn the ◉ dial to switch images.

● Press the ▲▼◀▶ buttons to choose an image.

▶ An orange frame appears on the chosen image.

● Press the FUNC./SET button to display the chosen image by itself.

Searching Images Using the Control Dial

Turning the control dial will display images in a line letting you quickly search them. You can also jump by the shooting date (Scroll Display).

Choose an image.

● If you set the camera to single image playback and turn the ◉ dial quickly, the images will display as shown on the left. Turn the ◉ dial to choose an image.

● Pressing the FUNC./SET button restores single image playback.

● If you press the ▲▼ buttons during Scroll Display, you can search images by the shooting date.

To turn off this effect, press the MENU button to choose [Scroll Display] in the ▶ tab, then choose [Off].

Viewing Images in Filtered Playback

When there are many images on the memory card, you can filter and display them by a specified filter. You can also protect (p. 132) or delete (p. 136) all images at once while filtered.

Jump to Favorites	Displays images tagged as favorites (p. 138)
Jump Shot Date	Displays the images shot on a specified date
Jump to My Category	Displays the images of a specified category (p. 139)
Jump to Still/Movie	Displays either still images or movies.
Jump 10 Images	Jumps over 10 images at a time.
Jump 100 Images	Jumps over 100 images at a time.

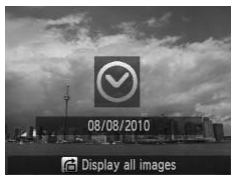
Search by , , and

Target Filters

1 Choose a target filter.

- In single image playback (excluding detailed information display), press the ▲ button, then press the ▲▼ buttons to choose a jump method.
- In , or , press the ◀▶ buttons to choose a filter. Turning the dial will only display images that match the filter of the chosen target image.
- Press the DISP. button to switch between Information Display and No Information Display.
- Pressing the MENU button restores single image playback.

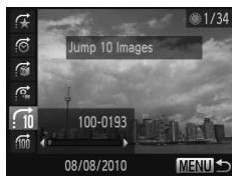
2 View the filtered images.

- Pressing the FUNC./SET button will start filtered playback, and the jump method and a yellow frame will appear.
- If you press the ◀▶ buttons or turn the dial, the chosen target images will display.
- If you press the ▲ button, [Filtered playback settings cleared] appears. Pressing the FUNC./SET button cancels filtered playback.

What if you can't choose a filter?

Filters that do not have any corresponding images cannot be chosen.

Filtered playback

In filtered playback (Step 2), you can view filtered images with "Quickly Searching Images" (p. 122), "Viewing Slideshows" (p. 125), and "Magnifying Images" (p. 127). You can process all filtered images at once while performing operations in "Protecting Images" (p. 132), "Erasing Images" (p. 136), or "Printing from the Print List (DPOF)" (p. 151), by choosing all of the filtered images.
However, if you change the category (p. 139), or edit an image and save it as a new image (p. 142), a message will appear, and filtered playback will cancel.

Jump by 10 and 100 Images

- In single image playback, press the ▲ button, then press the ▲▼ buttons to choose a jump method.
- If you press the ◀▶ buttons, the display will advance to the image that is the chosen number of images away.
- Pressing the MENU button restores single image playback.

Using the Control Ring to Jump

Turn the control ring to jump images using the ★, ⏲, 10 and 100 functions.

- In single image playback, turn the () ring, then press the ▲▼ buttons to choose a jump method.
- If you turn the () ring, the display will advance to the image that is the chosen number of images away.

Turning the () ring in index playback will advance the images according to the jump method chosen during single image playback. However, if you chose 10 or 100, the jump method will switch to ⏲.

Viewing Slideshows

You can automatically play back images recorded to a memory card.

1 Choose [Slideshow].

- Press the MENU button to choose [Slideshow] from the ▶ tab, then press the FUNC./SET button.

2 Make the setting.

- Press the ▲▼ buttons or turn the dial to choose an item, then press the ◀▶ buttons to adjust the setting.

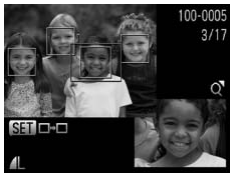
Repeat	Repeats playback of images
Play Time	Display time for each image
Effect	Transition effects when switching between images

3 Choose [Start].

- Press the ▲▼ buttons or turn the dial to choose [Start], then press the FUNC./SET button.
- ▶ The slideshow will start a few seconds after [Loading image...] displays.
- You can pause/restart a slideshow by pressing the FUNC./SET button again.
- Press the MENU button to stop the slideshow.

- If you press the ◀▶ buttons or turn the dial during playback, the image will switch. If you keep the ◀▶ buttons pressed, you can fast-forward through images.
- The power saving function (p. 51) does not work during slideshows.
- You cannot change [Play Time] if [Bubble] is chosen in [Effect].
- In single image playback, you can also start a slideshow by pressing and holding the FUNC/SET button and immediately pressing the button.

Checking the Focus

You can magnify the area of a recorded image that was inside the AF Frame, or the area of a face that was detected, to check the focus.

1 Press the DISP. button to switch to the focus check display (p. 44).

- A white frame will appear where the AF frame or face was when the focus was set.
- A gray frame will appear on a face detected during playback.
- The area within the orange frame appears magnified.

2 Switch frames.

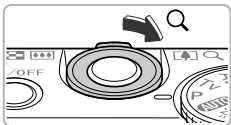
- Move the zoom lever toward Q once.
- The screen shown to the left will appear.
- Press the FUNC/SET button to move to a different frame when multiple frames appear.

3 Change the magnification level or location.

- Use the zoom lever to change the display size, and the ▲▼◀▶ buttons to change the display position while checking the focus.
- Pressing the MENU button resets the display to Step 1.

Magnifying Images

Move the zoom lever toward Q.

- The display will zoom in on the image. If you continue to hold the zoom lever, it will zoom in up to a maximum factor of 10x.
- If you press the ▲▼◀▶ buttons, you can move the location of the displayed area.
- Move the zoom lever toward ▦ to zoom out, or continue to hold it to return to single image playback.
- If you turn the ◉ dial, you can switch images while zoomed.

Approximate Location of Displayed Area

You can return to single image playback immediately by pressing the MENU button while the image is magnified.

Displaying Various Images (Smart Shuffle)

The camera will choose four images based on the displayed image.
If you choose one of those images, the camera will choose four more images letting you enjoy the playing back of images in an unexpected order.
This will work best if you take many shots of various scenes.

1 Choose [Smart Shuffle].

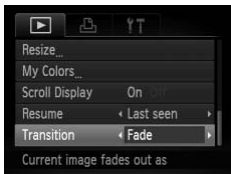
- Press the MENU button to choose [Smart Shuffle] from the ▶ tab, then press the FUNC/SET button.
- ▶ Four images will appear as possibilities.

2 Choose an image.

- Press the ▲▼◀▶ buttons to choose the image you want to view next.
- ▶ The chosen image will be displayed in the middle, and the next four possibilities will appear.
- Pressing the (FUNC/SET) button will display the middle image at full size. Press the (FUNC/SET) button again to restore the original display. You can also use the zoom lever.
- Pressing the MENU button restores single image playback.

- Only still images shot with this camera will play back in Smart Shuffle.
- [Smart Shuffle] is not available in the following situations:
  - If there are less than 50 images taken with this camera on the memory card.
  - If you play back images not supported by Smart Shuffle.
  - During filtered playback.

Changing Image Transitions

You can choose from three transition effects when switching between images in single image playback.

Choose [Transition].

- Press the MENU button to choose [Transition] in the ▶ tab, then press the ◀▶ buttons to choose a transition effect.

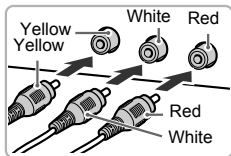
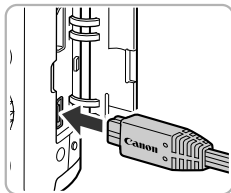
Viewing Images on a TV

Using the supplied Stereo AV cable (p. 2), you can connect the camera to a TV to view images you have shot.

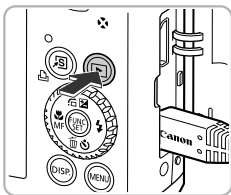
1 Turn off the camera and TV.

2 Connect the camera to the TV.

- Open the camera's terminal cover and fully insert the cable plug into the camera's terminal.

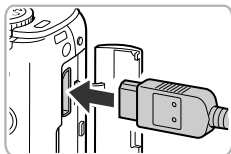
- Insert the cable plug fully into the video input terminals as shown in the illustration.

3 Turn on the TV and switch it to the input the cable is connected to.

4 Turn on the camera.

- Press the ▶ button to turn on the camera.
- ▶ The image will appear on the TV (nothing will appear on the screen of the camera).
- After you finish, turn off the camera and TV, and unplug the cable.

? What if the images don't display correctly on the TV?

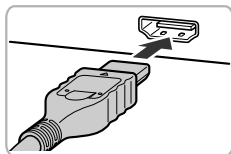
Images will not display correctly if the camera's video output setting (NTSC/PAL) does not match the TV system. Press the MENU button, choose the 𝐘𝐓 tab and [Video System] to switch to the correct video system.

Viewing Images on a High-Definition TV

Use the separately sold HDMI Cable HTC-100 to connect the camera to a high-definition TV for an enhanced viewing experience.

Turn off the camera and TV.

Connect the camera to the TV.

- Open the camera's terminal cover and fully insert the cable plug into the camera's terminal.

- Fully insert the cable plug into the TV's HDMI terminal.

Display images.

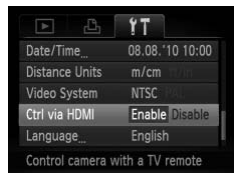
- Follow Steps 3 and 4 on p. 129 to display the images.

Operation sounds will not play when connected to a high-definition TV.

Using a TV Remote to Control the Camera

When you connect the camera to an HDMI CEC compatible TV, you can use the TV's remote control to operate the camera and play back images or view slideshows.
You may need to make settings on some TVs. For details, refer to the user guide supplied with the TV.

Choose [Ctrl via HDMI].

- Press the MENU button to choose [Ctrl via HDMI] in the 🔧 tab, then press the ◀▶ buttons to choose [Enable].

2 Connect the camera to the TV.

- Follow Steps 1 – 2 on p. 130 to connect the camera to the TV.

3 Display images.

- Turn on the TV and press the camera's ▶ button.
- ▶ The image will appear on the TV (nothing will appear on the screen of the camera).

4 Use the TV's remote control.

- Press the remote control's ◀▶ buttons to choose an image.
- Press the OK/Select button to display the camera control panel. Press the ◀▶ buttons to choose an item, then press the OK/Select button again.

Summary of the Camera Control Panel Displayed on the TV

↩	Return	Closes the menu.
▶	Play Movie	Plays a movie (only appears when a movie is chosen).
	Slideshow	Plays back images automatically. During playback, you can press the remote control's ◀▶ buttons to switch images.
	Index Playback	Displays images in an index.
DISP.	Change Display	Changes the screen display (p. 44).

- If you operate the controls on the camera, you will not be able to control the camera with the TV's remote control until you return to single image playback.
- Some TVs may not be able to control the camera properly even though they are HDMI CEC compatible.

Protecting Images

You can protect important images so that they cannot be accidentally erased with the camera (pp. 28, 136).

Choose a selection method

1 Choose [Protect].

- Press the MENU button to choose [Protect] in the ▶ tab, then press the FUNC./SET button.

2 Choose a selection method.

- Press the ▲▼ buttons or turn the dial to choose a selection method, then press the FUNC./SET button.
- Pressing the MENU button will restore the menu screen.

If you format the memory card (pp. 22, 51), protected images will also be erased.

Protected images cannot be erased with the camera's erase function. To erase an image, cancel protection settings first.

Choosing Images Individually

1 Choose [Select].

- Follow Step 2 above to choose [Select], then press the FUNC./SET button.

2 Choose images.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the FUNC./SET button.
- ▶ [key icon] will appear on the screen.
- Pressing the FUNC./SET button again deselects the image and [key icon] will disappear.
- To choose additional images, repeat the above procedure.

3 Protect the image.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◀▶ buttons or turn the dial to choose [OK], then press the FUNC./SET button.

If you switch shooting modes or turn off the power before performing the operations in Step 3, images will not be protected.

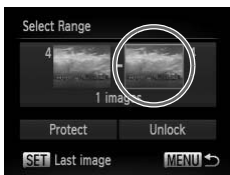
Select Range

1 Choose [Select Range].

- Follow Step 2 on p. 132 to choose [Select Range], then press the FUNC./SET button.

2 Choose a starting image.

- Press the FUNC./SET button.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the FUNC/SET button.

3 Choose an ending image.

- Press the ▶ button to choose [Last image], then press the FUNC/SET button.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the FUNC/SET button.
- You cannot choose images before the first image.

4 Protect images.

- Press the ▼ button to choose [Protect], then press the FUNC/SET button.

 Choose images with the dial

You can also choose the first or last image by turning the dial when the upper screen in Steps 2 and 3 is displayed.

Choose All Images

Choose [All Images].

- Follow Step 2 on p. 132 to choose [All Images], then press the (FUNC./SET) button.

Protect images.

- Press the ▲▼ buttons or turn the dial to choose [Protect], then press the (FUNC./SET) button.

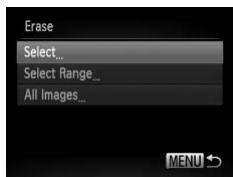
You can unlock groups of protected images if you choose [Unlock] in Step 4, while in [Select Range] or Step 2 while in [All Images].

Erasing Images

You can choose images and then erase them in groups. Since erased images cannot be recovered, exercise adequate caution before erasing. Protected images (p. 132) cannot be erased.

Choose a selection method

1 Choose [Erase].

- Press the MENU button to choose [Erase] in the ▶ tab, then press the FUNC./SET button.

2 Choose a selection method.

- Press the ▲▼ buttons or turn the dial to choose a selection method, then press the FUNC./SET button.
- Pressing the MENU button will restore the menu screen.

Choosing Images Individually

1 Choose [Select].

- Follow Step 2 above to choose [Select] and press the FUNC./SET button.

2 Choose an image.

- ▶ If you follow Step 2 on p. 133 to choose images, ✓ will appear on the screen.
- Pressing the FUNC./SET button again deselects the image and ✓ will disappear.
- To choose additional images, repeat the above procedure.

3 Erase.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◀▶ buttons or turn the dial to choose [OK], then press the FUNC/SET button.

Select Range

1 Choose [Select Range].

- Follow Step 2 on p. 136 to choose [Select Range], then press the FUNC/SET button.

2 Choose images.

- Follow Steps 2 and 3 on p. 133 to choose images.

3 Erase.

- Press the ▼ button to choose [Erase], then press the FUNC/SET button.

Choose All Images

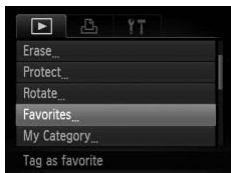
1 Choose [All Images].

- Follow Step 2 on p. 136 to choose [All Images], then press the FUNC/SET button.

2 Erase.

- Press the ◀▶ buttons or turn the dial to choose [OK], then press the FUNC/SET button.

Tagging Images as Favorites

When you tag images as favorites, you can easily categorize just those images. You can also filter out just those images for viewing, protecting or erasing (p. 123).

1 Choose [Favorites].

- Press the MENU button to choose [Favorites] in the ▶ tab, then press the FUNC./SET button.

2 Choose an image.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the FUNC./SET button.
- ▶ ★ will appear on the screen.
- Pressing the FUNC./SET button again untags the image and ★ disappears.
- To choose additional images, repeat the above procedure.

3 Make the setting.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◀▶ buttons or turn the dial to choose [OK], then press the FUNC./SET button.

If you switch Shooting modes or turn off the power before making the setting in Step 3, images will not be tagged as favorites.

If you use Windows 7 or Windows Vista and transfer tagged images to the computer, they will be given a star rating of 3 (★ ★ ★ ☆ ☆) (except for movies and RAW images).

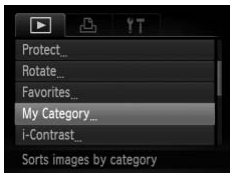
Organizing Images by Category (My Category)

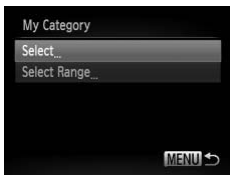
You can organize images into categories. You can display the images in a category in Filtered Playback (p. 123) and process all images at once by using the functions below.

- Viewing Slideshows (p. 125), Protecting Images (p. 132), Erasing All Images (p. 136), Choosing Images for Printing (DPOF) (p. 151)

Images are automatically categorized by shooting condition as they are shot.

- (People): Images with detected faces, or images shot in (Portrait) or (Kids & Pets) mode.
- (Scenery): Images detected as (Portrait), (Sunset) or (Night) in AUTO mode, or images shot in (Landscape) or (Foliage) mode.
- (Events): Images shot in (Beach), (Aquarium), (Snow) or (Fireworks) mode.

Choose a selection method

1 Choose [My Category].

- Press the MENU button to choose [My Category] in the ▶ tab, then press the (FUNC./SET) button.

2 Choose a selection method.

- Press the ▲▼ buttons or turn the ◉ dial to choose a selection method, then press the (FUNC./SET) button.
- Pressing the MENU button will restore the menu screen.

Choosing Images Individually

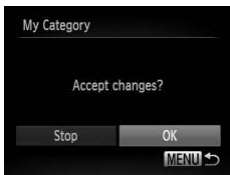
1 Choose [Select].

- Follow Step 2 above to choose [Select], then press the (FUNC./SET) button.

2 Choose an image.

- Press the ◀▶ buttons or turn the dial to choose an image.

3 Choose a category.

- Press the ▲▼ buttons to choose a category, then press the FUNC./SET button.
- ▶ ✓ will appear on the screen.
- Pressing the FUNC./SET button again deselects the image and ✓ will disappear.
- To choose additional images, repeat the above procedure.

4 Make the setting.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◀▶ buttons or turn the dial to choose [OK], then press the FUNC./SET button.

> ⓘ If you switch Shooting modes or turn off the power before making the setting in Step 4, images will not be tagged as My Category.

Select Range

1 Choose [Select Range].

- Follow Step 2 on p. 139, choose [Select Range], then press the FUNC./SET button.

2 Choose images.

- Follow Steps 2 and 3 on p. 133 to choose images.

3 Choose a category.

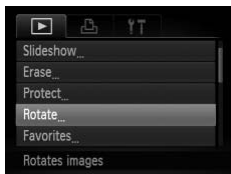
- Press the ▼ button to choose an item, then press the ◀▶ buttons or turn the dial to choose a category.

4 Choose the setting.

- Press the ▼ button to choose [Select], then press the FUNC./SET button.

If you choose [Deselect] in Step 4, you can deselect all of the images in the [Select Range] category.

Rotating Images

You can change the orientation of an image and save it.

1 Choose [Rotate].

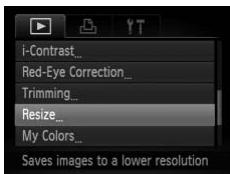
- Press the MENU button to choose [Rotate] in the ▶ tab, then press the FUNC./SET button.

2 Rotate the image.

- Press the ◀▶ buttons or turn the dial to choose an image.
- ▶ The image will rotate 90° with each press of the FUNC./SET button.
- Pressing the MENU button will restore the menu screen.

Movies with a resolution of 1280 cannot be rotated.

Resizing Images

You can resize images to a lower pixel setting and save the resized image as a separate file.

1 Choose [Resize].

- Press the MENU button to choose [Resize] in the ▶ tab, then press the FUNC./SET button.

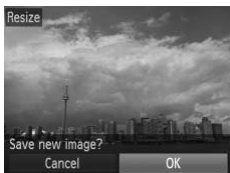
2 Choose an image.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the FUNC./SET button.

3 Choose an image size.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the FUNC./SET button.
- ▶ The [Save new image?] screen will appear.

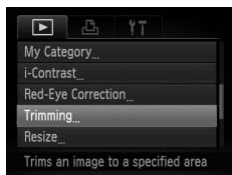
4 Save the new image.

- Press the ◀▶ buttons or turn the dial to choose [OK] and press the FUNC./SET button.
- ▶ The image will be saved as a new file.

5 Display the new image.

- When you press the MENU button, the [Display new image?] screen will appear.
- Press the ◀▶ buttons or turn the dial to choose [Yes], then press the FUNC./SET button.
- ▶ The saved image will be displayed.

- You cannot resize an image to a larger size.
- Images saved as XS in Step 3 cannot be edited.
- RAW images cannot be edited.

Trimming

You can cut out a portion of a recorded image and save it as a new image file.

Trimming Area

Trimming Area Display

Recorded pixels after trimming

1 Choose [Trimming].

- Press the MENU button to choose [Trimming] in the ▶ tab, then press the FUNC./SET button.

2 Choose an image.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the FUNC./SET button.

3 Adjust the trimming area.

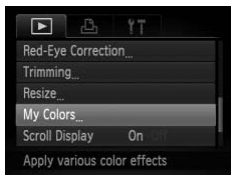
- ▶ A frame will appear around the portion of the image to be trimmed.
- ▶ The original image will display in the upper left and the trimmed image will display in the lower right.
- If you move the zoom lever to the left or right, you can change the frame size.
- If you press the ▲▼◀▶ buttons, you can move the frame.
- If you press the DISP. button, you can change the frame orientation.
- In an image with detected faces, gray frames appear around the faces located in the upper left image. The frames can be used for trimming. You can switch between frames by turning the dial.
- Press the FUNC./SET button.

4 Save as a new image and display.

- Follow Steps 4 and 5 on p. 142.

- Images recorded at a pixel setting of S (p. 77), or images resized to XS (p. 142) cannot be edited.
- RAW images cannot be edited.
- Images that can be trimmed will have the same wide and height ratio after trimming.
- The number of recorded pixels in a trimmed image will be smaller than before trimming.

Adding Effects with the My Colors Function

You can change the color of an image and save it as a separate image. Refer to p. 85 for details on each menu item.

1 Choose [My Colors].

- Press the MENU button to choose [My Colors] in the ▶ tab, then press the (FUNC. SET) button.

2 Choose an image.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the (FUNC. SET) button.

3 Choose a menu option.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the (FUNC. SET) button.

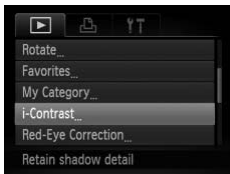
4 Save as a new image and display.

- Follow Steps 4 and 5 on p. 142.

If you repeatedly change the color of the same image, the quality will gradually deteriorate and you may not achieve the expected color.

- The color of images changed with this function may vary from those recorded with the My Colors function (p. 85).
- My Colors settings cannot be performed on RAW images.

Correcting the Brightness (i-Contrast)

The camera can detect areas in an image, such as faces or backgrounds, that are too dark and automatically adjust them to the optimum brightness. Also, when the overall image is lacking in contrast, the camera will automatically correct the image for a sharper impression. You can choose from four levels of correction, and save the image as a new file.

1 Choose [i-Contrast].

- Press the MENU button to choose [i-Contrast] in the ▶ tab, then press the FUNC./SET button.

2 Choose an image.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the FUNC./SET button.

3 Choose a menu item.

- Press the ◀▶ buttons or turn the dial to choose an option, then press the FUNC./SET button.

4 Save as a new image and display.

- Follow Steps 4 and 5 on p. 142.

- Under some conditions, the image may appear coarse or not be corrected properly.
- Repeatedly adjusting the same image may cause it to become coarse.

What if the image wasn't corrected by the [Auto] option as well as you would like?

Choose [Low], [Medium] or [High] and adjust the image.

Contrast correction cannot be performed on RAW images.

Correcting the Red-Eye Effect

You can automatically correct red eyes in images and save them as new files.

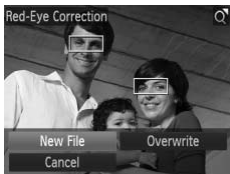
1 Choose [Red-Eye Correction].

- Press the MENU button to choose [Red-Eye Correction] in the ▶ tab, then press the FUNC./SET button.

2 Choose an image.

- Press the ◀▶ buttons or turn the dial to choose an image.

3 Correct the image.

- Press the FUNC./SET button.
- ▶ Red-eye detected by the camera will be corrected and a frame will appear around the corrected portion.
- You can magnify or reduce the size of the image using the procedures in "Magnifying Images" (p. 127).

4 Save as a new image and display.

- Press the ▲▼◀▶ buttons or turn the dial to choose [New File], then press the FUNC./SET button.
- ▶ The image will be saved as a new file.
- Follow Step 5 on p. 142.

- Some images may not be corrected properly.
- When [Overwrite] in Step 4 is chosen, the uncorrected image is overwritten with the corrected data, erasing the original image.
- Protected images cannot be overwritten.

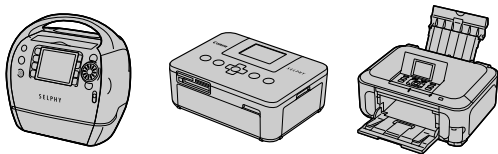
- Red-eye correction cannot be performed on RAW images.
- When shooting in RAW+JPEG, red-eye correction can be performed on the JPEG image, but the original image cannot be overwritten.

8

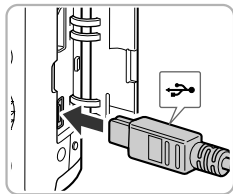
Printing

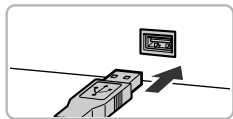
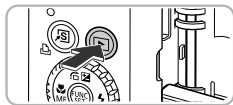
This chapter explains how to choose images for printing, and print using a Canon-brand PictBridge compliant printer (sold separately) (p. 40).

Please also refer to the *Personal Printing Guide*.

Canon-Brand PictBridge Compliant Printers

Printing Images

You can easily print the pictures you take by connecting the camera to a PictBridge compliant printer (sold separately) using the supplied interface cable (p. 2).

1 Turn off the camera and printer.

2 Connect the camera to the printer.

- Open the cover and insert the small plug of the included interface cable (p. 2) firmly into the camera terminal in the direction shown.
- Insert the interface cable's larger plug into the printer. For connection details, refer to the user guide provided with the printer.

3 Turn on the printer.

4 Turn on the camera.

- Press the ▶ button to turn on the camera.
- ▶ SET will appear on the screen.

5 Choose an image to print.

- Press the ◀▶ buttons or turn the ◉ dial to choose an image.

6 Print images.

- Press the 🖶 button.
- ▶ Printing will start.
- If you want to print additional images, repeat Steps 5 and 6 after printing has completed.
- After printing has completed, turn off the camera and printer, and unplug the interface cable.

- Refer to the *Personal Printing Guide* for details on printing.
- Refer to p. 40 for Canon-brand Pictbridge compliant printers.
- Index printing (p. 151) is not available on certain Canon-brand PictBridge compliant printers (sold separately).
- RAW images cannot be printed.

Printing from the Print List (DPOF)

You can add images to the print list (DPOF) directly after shooting or during playback by pressing the ⎙ button.
These selection methods comply with the DPOF (Digital Print Order Format) standards.

1 Choose an image.

- Press the ◀▶ buttons or turn the ● dial to choose an image.

2 Press the ⎙ button (RAW images and movies will be excluded).

3 Add images to the print list.

- Press the ▲▼ buttons to choose the number of prints, then press the ◀▶ buttons or turn the ● dial to choose [Add] and press the (FUNC/SET) button.
- To cancel adding images, repeat Steps 1 and 2, and press the ◀▶ buttons or turn the ● dial to choose [Remove], then press the (FUNC/SET) button.

You cannot add images to the print list when the camera is connected to the printer.

Choosing Images for Printing (DPOF)

You can choose up to 998 images on a memory card for printing and specify settings such as the number of copies so that they can be printed together (p. 154) or processed at a photo developer service. These selection methods comply with the DPOF (Digital Print Order Format) standards.

Print Settings

You can set the print type, date and file number. These settings apply to all images chosen for printing.

1 Choose [Print Settings].

- Press the MENU button to choose [Print Settings] in the 凸 tab, then press the FUNC. SET button.

2 Adjust the settings.

- Press the ▲▼ buttons or turn the dial to choose a menu item, then press the ◀▶ buttons to choose an option.
- Pressing the MENU button accepts the settings and restores the menu screen.

Print Type	Standard	Prints one image per page.
	Index	Prints several reduced size images per page.
	Both	Prints both standard and index formats.
Date	On	Prints the shooting date.
	Off	—
File No.	On	Prints the file number.
	Off	—
Clear DPOF data	On	Removes all print settings after printing.
	Off	—

- Some printers or photo developer services may not be able to reflect all of the settings in the prints.
- ! may appear when using a memory card with print settings set by a different camera. These settings will be overwritten with those set by your camera.
- If [Date] is set to [On], some printers may print the date twice.

- With [Index] chosen, the [Date] and [File No.] options cannot be set to [On] at the same time.
- The date will be printed in the style set in the [Date/Time] function in the 𝐘𝐓 tab (p. 19).
- Movies and RAW images cannot be chosen.

Choosing the Number of Copies

1 Choose [Select Images & Qty.].

- Press the MENU button to choose [Select Images & Qty.] in the 凸 tab, then press the FUNC/SET button.

2 Choose an image.

- Press the ◀▶ buttons or turn the ● dial to choose an image, then press the FUNC/SET button.
- ▶ You will be able to set the number of print copies.
- If you choose images in [Index], ✓ appears on the screen. Pressing the FUNC/SET button again will deselect the image and ✓ will disappear.

3 Set the number of prints.

- Press the ▲▼ buttons or turn the ● dial to set the number of prints (maximum 99).
- Repeat Steps 2 and 3 to choose other images and the number of prints for each.
- You cannot set the number of copies for index prints. You can only choose which images to print (as shown in Step 2).
- Pressing the MENU button accepts the settings and restores the menu screen.

Select Range

1 Choose [Select Range].

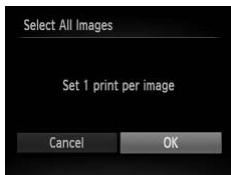
- In Step 1 on p. 152, choose [Select Range], then press the FUNC./SET button.
- Follow Steps 2 and 3 on p. 133 to choose images.

2 Make print settings.

- Press the ▲▼ buttons to choose [Order], then press the FUNC./SET button.

Set All Images to Print Once

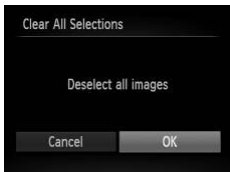
1 Choose [Select All Images].

- In Step 1 on p. 152, choose [Select All Images], then press the FUNC./SET button.

2 Make print settings.

- Press the ◀▶ buttons or turn the ● dial to choose [OK], then press the FUNC./SET button.

Clearing All Selections

1 Choose [Clear All Selections].

- In Step 1 on p. 152, choose [Clear All Selections], then press the FUNC./SET button.

2 All selections will be cleared.

- Press the ◀▶ buttons or turn the ◉ dial to choose [OK], then press the (FUNC. SET) button.

Print Added Images

You can print images added to the print list by connecting the camera to a PictBridge compliant printer (pp. 150 – 153).

1 Connect the camera to the printer.

- Follow Steps 1 to 4 on p. 148.

2 Print.

- Press the ▲▼ buttons to choose [Print now], then press the (FUNC. SET) button.
- ▶ Printing will start.
- If you stop the printer during printing and start again, it will start from the next print.

9

Customizing Camera Settings

You can customize various settings to suit your shooting preferences.
The first part of this chapter explains convenient and commonly used functions.
The latter part explains how to change shooting and playback settings to suit your purposes.

Changing Camera Settings

You can customize convenient and commonly used functions from the 𝕐𝕋 tab (p. 47).

Changing Sounds

You can change each of the camera's operation sounds.

- Choose [Sound Options], then press the FUNC./SET button.
- Press the ▲▼ buttons or turn the dial to choose an option.
- Press the ◀▶ buttons to choose an option.

1, 2	Preset sounds (cannot be modified)
3	Preset sounds You can use the included software to change the sounds (p. 2).

Turning off Hints & Tips

When you choose an item in the FUNC. menu (p. 46) or MENU (p. 47), a description of the function (hints and tips) is displayed. You can turn off this function.

- Choose [Hints & Tips], then press the ◀▶ buttons to choose [Off].

Changing the Start-up Screen

You can change the start-up screen that appears when you turn on the camera.

- Choose [Start-up Image], then press the FUNC./SET button.
- Press the ◀▶ buttons or turn the dial to choose an option.

(No start-up image icon)	No start-up image
1, 2	Preset images (cannot be modified)
3	Preset images You can set recorded images, and use the included software to change the images.

Registering Recorded Images as the Start-up Screen

When you press the ▶ button and set the camera to Playback mode, you can register an image.

- Choose [Start-up Image], then press the FUNC./SET button.
- Press the ◀▶ buttons or turn the dial to choose [3], then press the FUNC./SET button.

- Press the ◀▶ buttons or turn the dial to choose an image, then press the FUNC./SET button.
- Press the ◀▶ buttons or turn the dial to choose [OK], then press the FUNC./SET button to complete registration.

Any previously registered start-up image will be overwritten when registering a new start-up image.

Register the start-up image or sounds with the included software

The dedicated operation sounds and start-up images on the included software can be registered to the camera. Refer to the *Software Guide* for details.

Changing the File Number Assignment

Images you shoot are automatically assigned file numbers in the order they were taken, from 0001 – 9999, and saved to folders of up to 2,000 images. You can change the file number assignment.

- Choose [File Numbering], then press the ◀▶ buttons to choose an option.

Continuous	Even if you shoot using a new memory card, the file numbers are assigned consecutively until an image with the number 9999 is taken/saved.
Auto Reset	If you replace the memory card with a new one, or a new folder is created, file numbering begins with 0001 again.

- If you use a memory card already containing images, the newly assigned file numbers may continue the existing numbering for both [Continuous] and [Auto Reset]. If you want to start over with file number 0001, format the memory card before use (p. 22).
- Refer to the *Software Guide* for information regarding folder structure or image types.

Creating Folders by Shooting Date

Images are saved into folders created each month, however, you can also create folders by shooting date.

- Choose [Create Folder], then press the ◀▶ buttons to choose [Daily].
- Images will be saved into folders created on each shooting date.

Changing the Lens Retract Time

For safety reasons, the lens retracts about 1 minute after pressing the ▶ button when in a Shooting mode (p. 27). If you want the lens to retract immediately when you press the ▶ button, set the retract time to [0 sec.].

- Choose [Lens Retract], then press the ◀▶ buttons to choose [0 sec.].

Turning Off the Power Saving Function

You can set the power saving function (p. 51) to [Off]. Setting it to [On] is recommended to save battery power.

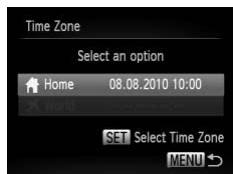
- Choose [Power Saving], then press the FUNC./SET button.
- Press the ▲▼ buttons or turn the dial to choose [Auto Power Down], then press the ◀▶ buttons to choose [Off].
- If you set the power saving function to [Off], be sure to turn the camera off after use.

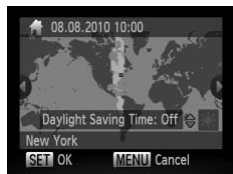
Setting the Screen Shut-Off Time

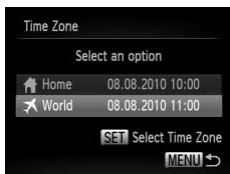
You can adjust the time the screen takes to shut off automatically (p. 51). This also works when [Auto Power Down] is set to [Off].

- Choose [Power Saving], then press the FUNC./SET button.
- Press the ▲▼ buttons or turn the dial to choose [Display Off], then press the ◀▶ buttons to choose a time.
- In order to save battery power, you should choose less than [1 min.].

Using the World Clock

When travelling abroad, you can record images with local dates and times simply by switching the time zone setting. If you pre-register the destination time zones, you can enjoy the convenience of not having to switch the Date/ Time settings.

1 Set the home time zone.

- Choose [Time Zone], then press the FUNC./SET button.
- When setting this for the first time, check the information that displays on the screen at the left, then press the FUNC./SET button.
- Press the ◀▶ buttons or turn the dial to choose the home time zone.
- To set daylight saving time (adds 1 hour), press the ▲▼ buttons to choose ☀.
- Press the FUNC./SET button.

2 Set the world time zone.

- Press the ▲▼ buttons or turn the dial to choose [World], then press the FUNC./SET button.
- Press the ◀▶ buttons or turn the dial to choose the destination time zone.
- You can also set the daylight saving time as in Step 1.
- Press the FUNC./SET button.

3 Choose the world time zone.

- Press the ▲▼ buttons or turn the dial to choose the World icon, then press the MENU button.
- ▶ The World icon will appear on the shooting screen (p. 178).

If you change the date or time in the World setting (p. 20), your [Home] time and date will automatically change.

Changing Distance Units

You can change the distance units that display in the MF indicator (p. 93) from m/cm to ft/in.

- Choose [Distance Units], then press the ◀▶ buttons to choose [ft/in].

Changing Shooting Function Settings

If you set the mode dial to P, you can change the settings in the 📷 tab (p. 47).

Before attempting to shoot using a function explained in this chapter in modes other than P mode, check if the function is available in those modes (pp. 182 – 185).

Turning Off the AF Assist Beam

The lamp will automatically light to assist focusing in low light conditions when you press the shutter button halfway. You can turn off the lamp.

- Choose [AF-assist Beam], then press the ◀▶ buttons to choose [Off].

Changing the Flash Timing

You can change the timing of the flash and shutter.

- Choose [Flash Settings], then press the FUNC./SET button.
- Press the ▲▼ buttons or turn the dial to choose [Shutter Sync.], then press the ◀▶ buttons to choose a setting.

1st-curtain	The flash fires right after the shutter opens.
2nd-curtain	The flash fires right before the shutter closes.

Turning Off the Red-Eye Reduction Function

The red-eye reduction lamp lights in order to reduce the red-eye effect that occurs when shooting in dark conditions with the flash. You can turn off this function.

- Choose [Flash Settings], then press the FUNC./SET button.
- Press the ▲▼ buttons or turn the ◎ dial to choose [Red-Eye Lamp], then press the ◀▶ buttons to choose [Off].

Changing the Image Display Time Right After Shooting

You can change the length of time the images display right after shooting.

- Choose [Review], then press the ◀▶ buttons to choose an option.

2 – 10 sec.	Displays images for the set time.
Hold	The image displays until you press the shutter button halfway.
Off	Images will not display.

Changing the Way the Image Displays Right After Shooting

You can change the way the image displays right after shooting.

- Choose [Review Info], then press the ◀▶ buttons to choose an option.

Off	Displays the image only.
Detailed	Displays detailed information (p. 180).
Focus Check	The area inside the AF frame is magnified, allowing you to check the focus. The procedure is the same as in "Checking the Focus" (p. 126).

Customizing Display Information

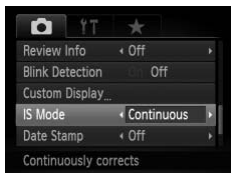
You can change which information is displayed by switching between custom displays with each press of the DISP. button.

- Choose [Custom Display], then press the FUNC. SET button.
- Press the ▲▼◀▶ buttons or turn the dial to choose an item, then press the FUNC. SET button. ✓ will appear on items that display.
- ▶ Items with ✓ will display.
- To turn off a custom display, choose 1 or 2 and press the FUNC. SET button. A ⃠ mark will appear. However, the custom display currently being used in the shooting screen cannot be turned off.

Shooting Info	Displays shooting information (p. 178).
Grid Lines	A grid overlays the screen.
Histogram	A histogram (p. 45) appears in Shooting modes P, Tv, Av, M.

If you press the shutter button halfway and return to the shooting screen from the custom display settings screen, the settings will not be saved.

- Gray items can also be set, however, they may not appear depending on the Shooting mode.
- Grid lines will not be recorded on the image.

Changing the IS-Mode Settings

- Choose [IS Mode], then press the ◀▶ buttons to choose an option.

Continuous	Image stabilization is always on. You can confirm the effects directly on the display, which makes it easier to check the composition or focus. It not only reduces angular blur, but also reduces lateral shift blur (hybrid IS) common to macro photography.
Shoot Only	Image stabilization is only active at the moment of shooting.
Panning	Image stabilization only counters up and down motion. This option is recommended for shooting objects moving horizontally.

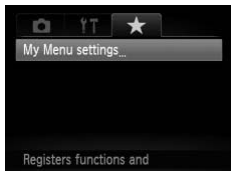
- If camera shake is too strong, attach the camera to a tripod. You should also set the IS Mode to [Off] when the camera is attached to a tripod.
- When using [Panning], hold the camera horizontally to shoot. Image stabilization does not work when the camera is held vertically.

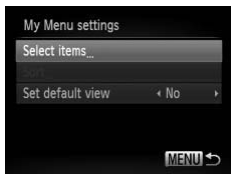
Registering Functions to the Button

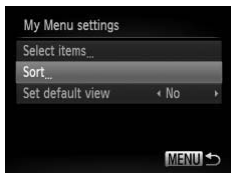
- Choose [Set Shortcut button], then press the button.
- Press the ▲▼◀▶ buttons or turn the dial to choose the functions to register, then press the button.
- Pressing the button will call up the registered function.

- Choose if you want to return the button to default settings.
- When this symbol is shown on the bottom right of an icon, the function cannot be used in the current Shooting mode or function setting.
- In , each press of the button records white balance data (p. 82), and the white balance settings change to .
- In AFL, each press of the button will adjust and lock the focus, and AFL will appear on the screen.
- If you press the button in , the screen displays will turn off. Try one of the following to restore the displays:
  - Press any button other than the power button
  - Change the camera's vertical or horizontal orientation

Registering Commonly Used Shooting Menus (My Menu)

You can register up to 5 items from commonly used shooting menus to the ★ tab, letting you quickly access these items from a single screen.

1 Choose [My Menu settings].

- Choose [My Menu settings] in the ★ tab, then press the (FUNC/SET) button.

2 Choose the menu items to register.

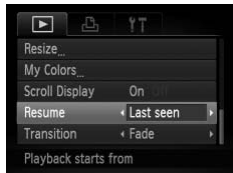
- Press the ▲▼ buttons or turn the dial to choose [Select items], then press the (FUNC/SET) button.
- Press the ▲▼ buttons or turn the dial to choose a menu to register (up to 5), then press the (FUNC/SET) button.
- ▶ ✓ will appear.
- To cancel registration, press the (FUNC/SET) button, and ✓ will disappear.
- Press the MENU button.

3 Change the order in which menu items are displayed.

- Press the ▲▼ buttons or turn the dial to choose [Sort], then press the (FUNC/SET) button.
- Press the ▲▼ buttons or turn the dial to choose the menu item you want to move, then press the (FUNC/SET) button.
- Press the ▲▼ buttons or turn the dial to change the order, then press the (FUNC/SET) button.
- Press the MENU button.

- Gray items in Step 2 can also be set, however, they may not be available depending on the Shooting mode.
- Choose [Set default view] and press the ◀▶ buttons to choose [Yes]. My Menu can now be displayed by pressing the MENU button when in a Shooting mode.

Changing Playback Function Settings

You can adjust the settings in the ▶ tab by pressing the ▶ button (p. 47).

Choosing the Image that First Displays in Playback

- Choose [Resume], then press the ◀▶ buttons to choose an option.

Last seen	Resumes with the image last viewed.
Last shot	Resumes with the most recently shot image.

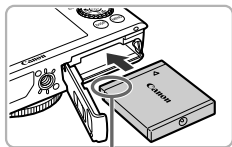
10

Useful Information

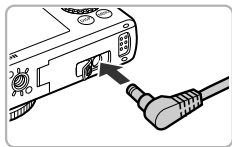
This chapter introduces how to use the AC adapter kit and Eye-Fi card (both sold separately), troubleshooting tips, and contains lists of functions and items that appear on the screen.

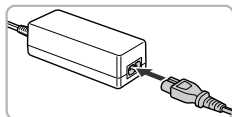
Using Household Power

If you use AC Adapter Kit ACK-DC40 (sold separately), you can use the camera without worrying about how much charge is left in the battery.

1 Turn off the camera.

Terminals

2 Insert the coupler.

- Follow Step 2 on p. 17 to open the cover, then insert the coupler as shown until it locks into place with a click.
- Follow Step 5 on p. 17 to close the cover.

3 Plug the cord into the coupler.

- Open the cover and fully insert the plug into the coupler.

4 Connect the power cord.

- Connect the power cord to the compact power adapter, then plug the other end into a power outlet.
- Turn the camera on to use it.
- After you finish, turn off the camera and unplug the power cord from the power outlet.

Do not unplug the plug or power cord with the camera turned on. This could erase images you have taken or damage the camera.

Using an Eye-Fi Card

Before using an Eye-Fi card, be sure to check whether Eye-Fi card use is authorized in the country or territory of use (p. 16).

When you put a prepared Eye-Fi card into the camera, you can automatically transfer your images wirelessly to a computer, or upload them to a web service.
Image transfer is a function of the Eye-Fi card. For details on how to setup and use the card, and concerning problems transferring images, please refer to the Eye-Fi card user guide, or contact the manufacturer.

Please keep the following things in mind when using an Eye-Fi card.

- Even if you set [Eye-Fi trans.] to [Disable] (p. 172), the Eye-Fi card may transmit radio waves. Be sure to remove the Eye-Fi card from the camera before entering areas that prevent unauthorized transmission of radio waves, such as hospitals and airplanes.
- If you have trouble transferring images, check the card or computer settings. For details, refer to the user guide supplied with the card.
- Depending on the connection status of the wireless network, it may take time to transfer images, or image transfer may be interrupted.
- Due to its transfer function, the Eye-Fi card may become hot.
- Battery consumption will be quicker than in normal use.
- Camera operations will be slower than in normal use. This may be resolved by setting [Eye-Fi trans.] to [Disable].

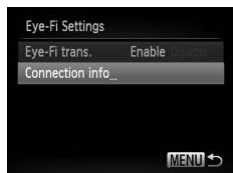
If you put an Eye-Fi card into the camera, the connection status can be checked in the shooting screen (Information Display) and playback screen (Simple Information Display).

(Gray)	Not connected
(Flashing white)	Connecting
(White)	Transfer standby
(Animated)	Transferring
	Interrupted
	Error retrieving Eye-Fi card info (Turn the camera off and on again. If this continues to appear, there may be a problem with the card.)

will appear on transferred images.

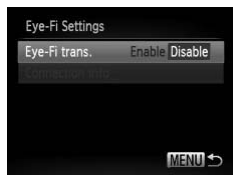
The power saving function does not work while transferring images (p. 51).

Checking Connection Information

You can check the Eye-Fi card's access point SSID, or connection status.

Choose [Connection info].

- Press the MENU button, then choose [Eye-Fi Settings] from the 🔧 tab, and press the FUNC. SET button.
- Press the ▲▼ buttons or turn the dial to choose [Connection info], then press the FUNC. SET button.
- ▶ The Connection info screen will appear.

Disabling Eye-Fi Transfer

You can set the card to disable Eye-Fi transfer.

Choose [Disable] in [Eye-Fi trans.].

- Press the MENU button to choose [Eye-Fi Settings] from the 🔧 tab, then press the FUNC. SET button.
- Press the ▲▼ buttons or turn the dial to choose [Eye-Fi trans.], then press the ◀▶ buttons to choose [Disable].

What if [Eye-Fi Settings] does not appear?

[Eye-Fi Settings] will only appear when an Eye-Fi card is inserted in the camera.

If the Eye-Fi card has a write-protect tab, you will not be able to check the card's connection status, or set [Eye-Fi trans.] to [Disable] when the tab is in the locked position.

Troubleshooting

If you think there is a problem with the camera, first check the following. If the items below do not solve your problem, contact a Canon Customer Support Help Desk as listed on the included customer support list.

Power

You pressed the power button, but nothing happened.

- Confirm that the battery is the correct type, and is not depleted (p. 15).
- Confirm that the battery is properly inserted (p. 17).
- Confirm that the memory card/battery cover is securely closed (p. 17).
- If the battery terminals are dirty, battery performance will decrease. Clean the terminals with a cotton swab and re-insert the battery several times.

Battery is consumed quickly.

- Battery performance decreases at low temperatures. Warm the battery, for example, by placing it in your pocket with the terminal cover on.

Lens will not retract.

- Do not open the memory card/battery cover while the power is on. After closing the memory card/battery cover, turn the power on then back off (p. 17).

TV output

Image is distorted or not showing on TV (p. 129).

Shooting

Cannot shoot.

- When in Playback mode (p. 21), press the shutter button halfway (p. 23).

Screen does not display properly in dark places (p. 44).

Screen does not display properly while shooting.

Please note, the following will not be recorded in still images, but will be recorded in movies.

- When the camera is subjected to powerful light sources, the display may darken.
- When shooting under fluorescent or LED lighting, the screen may flicker.
- When shooting bright light sources, a bar of light (purplish red) may appear on the screen.

A flashing ⚡ appears on the screen and the shot cannot be taken even though the shutter button was pressed fully (p. 26).

appears when the shutter button is pressed halfway (p. 54).

- Set the [IS mode] to [Continuous] (p. 165).
- Set the flash to ⚡ (p. 75).
- Increase the ISO speed (p. 80).
- Attach the camera to a tripod. Additionally, you should set the [IS Mode] to [Off] when shooting with a tripod (p. 165).

Image is blurred.

- Press the shutter button halfway to focus on the subject, then press fully to shoot (p. 23).
- Shoot the subject within the focusing distance (p. 188).
- Set the [AF-assist Beam] to [On] (p. 162).
- Confirm that functions which you do not intend to use (macro, etc.) are not set.
- Shoot using the focus lock or AF lock (pp. 86, 90).

Even when you press the shutter button halfway, the AF frame does not appear, and the camera does not focus.

- If you center on the light and dark contrasting area of the subject and push the shutter button halfway, or repeatedly push the shutter button halfway, the AF frame will appear and the camera will focus.

Subject is too dark.

- Set the flash to ⚡ (p. 75).
- Correct the brightness with exposure compensation (p. 74).
- Adjust the image with i-Contrast (pp. 104, 145).
- Use AE Lock, or spot metering to shoot (pp. 95, 96).

Subject is too bright (overexposed).

- Set the flash to ⊕ (p. 54).
- Correct the brightness with exposure compensation (p. 74).
- Use AE Lock, or spot metering to shoot (pp. 95, 96).
- Reduce the light illuminating the subject.

Image is dark even though the flash fired (p. 26).

- Shoot within an appropriate distance for flash photography (p. 75).
- Correct the flash exposure compensation amount or flash output (pp. 106, 107).
- Increase the ISO speed (p. 80).

Image taken using the flash is too bright (overexposed).

- Shoot within an appropriate distance for flash photography (p. 75).
- Set the flash to ⊕ (p. 54).
- Correct the flash exposure compensation amount or flash output (pp. 106, 107).

White dots appear on the image when shooting with the flash.

- Light from the flash has reflected off dust particles or other objects in the air.

Image appears rough or grainy.

- Shoot with the ISO speed on a lower setting (p. 80).
- Depending on the Shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (p. 63).

Eyes appear red (p. 105).

- Set the [Red-Eye Lamp] to [On] (p. 163). When shooting with the flash, the lamp (on the front of the camera) lights (p. 42), and for approximately 1 second while the camera is reducing red-eye, it is not possible to shoot. It is more effective if the subject is looking directly at the lamp. Even better results can be obtained by increasing the lighting in indoor settings or approaching closer to the subject.

Recording images to the memory card takes a long time, or continuous shooting slows down.

- Perform a low-level format of the memory card in the camera (p. 51).

Cannot make settings for shooting functions or FUNC. menu.

- The items in which settings can be made differ depending on the shooting mode. Refer to “Functions Available in Each Shooting Mode” and “Shooting Menu” (pp. 182 – 185).

Shooting movies

Correct shooting time does not display, or stops.

- Format the memory card in the camera, or use a memory card capable of recording at high speeds. Even when the shooting time does not display properly, the recorded video will be the length that it was actually shot (pp. 22, 30).

! appeared on the screen and shooting ended automatically.

The camera’s internal memory was insufficient. Try one of the following:

- Perform a low-level format of the memory card in the camera (p. 51).
- Change the image quality setting (p. 116).
- Use a memory card capable of recording at high speeds (p. 116).

Zoom does not operate.

- You can use the digital zoom while recording, but not the optical zoom (p. 118).

Playback

Cannot play back images or movies.

- If the file name or folder structure is changed on a computer, you may not be able to play back images or movies. Refer to the *Software Guide* for information regarding folder structure or file names.

Playback stops, or audio cuts out.

- Use a memory card that has had a low-level format performed on it with this camera (p. 51).
- If you copy a movie to a memory card that reads slowly, playback may interrupt momentarily.
- Depending on its capabilities, when playing movies on a computer, frames may drop or the audio may cut out.

Computer

Cannot transfer images to a computer.

It may be possible to solve the problem when the camera is connected to a computer via cable by reducing the transfer speed.

- Press the ▶ button to enter Playback mode. Then press and hold the MENU button and press the ▲ and FUNC/SET buttons together. In the screen that appears, press the ◀▶ buttons to choose [B] and press the FUNC/SET button.

Eye-Fi Card

Cannot transfer images (p. 171).

List of Messages That Appear on the Screen

If error messages appear on the screen, try one of the following solutions.

No memory card

- The memory card is not installed in the correct direction. Install the memory card in the correct direction (p. 17).

Memory card locked

- The SD memory card, SDHC memory card or SDXC memory card's or Eye-Fi card's write protect tab is set to "LOCK". Unlock the write protect tab (pp. 16, 17).

Cannot record!

- You attempted to shoot an image without a memory card. Install the memory card in the correct direction to shoot (p. 17).

Memory card error (p. 51)

- If the same message appears even when a formatted memory card is installed in the correct direction, contact a Canon Customer Support Help Desk (p. 17).

Insufficient space on card

- There is not enough free space on the memory card to shoot (pp. 24, 29, 53, 73) or edit images (pp. 142 – 146). Erase the images (pp. 28, 136) to open space for new images, or insert an empty memory card (p. 17).

Change the battery pack. (p. 15)

No Image.

- There are no images recorded on the memory card that can be displayed.

Protected! (p. 132)

Unidentified Image/Incompatible JPEG/Image too large./Cannot play back AVI/RAW

- Unsupported images, or images with corrupted data cannot be displayed.
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not display.

Cannot magnify!/Cannot play back this content in Smart Shuffle/Cannot rotate/Cannot modify image/Cannot register this image!/Cannot modify/ Cannot assign to category/Unselectable image.

- Incompatible images cannot be magnified (p. 127), played back in Smart Shuffle (p. 127), tagged as favorites (p. 138), rotated (p. 141), edited (pp. 142 – 146), registered to the start-up screen (p. 157), categorized (p. 139), or added to a print list (pp. 150, 151).
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not be magnified, played back in Smart Shuffle, tagged as favorites, rotated, edited, registered to the start-up screen, categorized, or added to a print list.
- Movies cannot be magnified (p. 127), played back in Smart Shuffle (p. 127), edited (pp. 142 – 146), added to a print list (pp. 150, 151), or registered to the start-up screen (p. 157).

Invalid selection range

- When choosing the selection range (pp. 133, 137, 140, 153), you tried to choose a starting image that was after the last image or you tried to choose an ending image that was before the starting image.

Exceeded selection limit

- You chose more than 998 images in print settings. Choose less than 998 images (p. 152).
- Print settings could not be saved correctly. Reduce the number of selected images and try again (p. 152).
- You chose 501 or more images in Protect (p. 132), Erase (p. 136), Favorites (p. 138), My Category (p. 139) or Print Settings (DPOF) (p. 151).

Communication error

- Images could not be transferred to the computer or printed due to the large amount of images (approx. 1000) stored on the memory card. Use a commercially available USB card reader to transfer the images. Insert the memory card into the printer's card slot to print.

Naming error!

- The folder or image could not be created because there is an image with the same file name as the folder or image that the camera is attempting to create, or the highest possible file number has already been reached. In the 𝐘𝐓 menu, change [File Numbering] to [Auto Reset] (p. 158) or format the memory card (p. 22).

Lens Error

- This error can occur if you hold the lens while it is in motion or when using it in a location with excessive dust or sand in the air.
- If this error message continues to appear, contact a Canon Customer Support Help Desk as there may be a problem with the lens.

[Wrong flash position Restart the camera] appears on the screen (p. 26).

A camera error was detected (Error number)

- If an error code appears directly after taking a picture, the shot may not have been recorded. Check the image in Playback mode.
- If this error code reappears, note the Error number (Exx) and contact a Canon Customer Support Help Desk as there may be a problem with the camera.

Information Displayed on the Screen

Shooting (Information Display)

① Battery Charge Indicator (p. 15)
② Camera Orientation*
③ White Balance (p. 82)
④ White Balance Correction (p. 83)
⑤ My Colors (p. 85)
⑥ AEB Shooting (p. 97) / Focus Bracketing (p. 94)
⑦ Drive Mode (p. 84)
⑧ Eye-Fi Connection Status (p. 171)
⑨ Metering Method (p. 95)
⑩ Histogram (p. 45)
⑪ Compression (Image Quality) (p. 76) / Movie Image Quality (p. 116), RAW (p. 78)
⑫ Still Images: Recordable Shots (p. 77)
Movies: Remaining Time (pp. 30, 116)
⑬ Self-Timer (p. 59)
⑭ AF Frame (p. 88)
⑮ Focal Lengths (p. 57)
⑯ Spot AE Point Frame (p. 95)
⑰ Digital Zoom Magnification (p. 55) / Digital Tele-converter (p. 56)
⑱ Focusing Range (pp. 75, 93)
⑲ Shooting Mode (p. 182), Scene Icon (p. 179)
⑳ Flash Mode (pp. 54, 75, 106)
㉑ Red-Eye Correction (p. 146)
㉒ Flash Exposure Compensation / Flash Output (pp. 106, 107)
㉓ Date Stamp (p. 58)
㉔ ISO Speed (p. 80)
㉕ AE Lock (p. 96), FE Lock (p. 96)
㉖ Grid Lines (p. 164)
㉗ Shutter Speed (pp. 98, 100)
㉘ Aspect Ratio (p. 79)
㉙ Aperture Value (pp. 99, 100)
㉚ Exposure Compensation Amount (p. 74)
㉛ i-Contrast (p. 104)
㉜ Camera shake warning (p. 165)
㉝ Exposure Shift Bar
㉞ Zoom Bar (p. 24)
㉟ Blink Detection (p. 111)
㊱ Exposure Level (p. 100)
㊲ MF Indicator (p. 93)
㊳ Image Stabilizer (p. 165)
㊴ Time Zone (p. 160)
㊵ Wind Filter (p. 117)

* : Standard, : Held vertically
When shooting, the camera detects if it is held vertically or horizontally, and adjusts settings accordingly for the best shot. It also detects orientation during playback, so you can hold the camera in either orientation and it will automatically rotate images for correct viewing.
This function may not operate correctly when the camera is pointed straight up or down.

Scene Icons

In AUTO mode, the camera displays an icon for the scene it has determined and then automatically focuses and selects the optimum settings for subject brightness and color.

Subject / Background	People			Non-Human Subjects/ Landscapes	Close Subjects	Icon Background Color
		When Moving	With Strong Facial Shadows			
Bright				AUTO		Gray
Backlit			—			
Including Blue Skies				AUTO		Light Blue
Backlit			—			
Sunsets	—				—	Orange
Spotlights						Dark Blue
Dark				AUTO		
When Using Tripod	*	—		*	—	

* Appears when the scene is dark and the camera is attached to a tripod.

Playback (Detailed Information Display)

① RGB Histogram (p. 45)
② My Category (p. 139)
③ Shooting mode (p. 182)
④ ISO Speed (p. 80), Playback Speed (Movies) (p. 115)
⑤ Exposure Compensation (p. 74), Exposure Shift Amount (p. 117)
⑥ White Balance (p. 82)
⑦ Histogram (p. 45)
⑧ Image Editing (pp. 142 – 146)
⑨ Compression (Image Quality) (p. 76) / Recording Pixels (pp. 76, 116), RAW (p. 78), MOV (Movies)
⑩ Print List (pp. 150, 151)
⑪ Eye-Fi Transfer Complete (p. 171)
⑫ Battery Charge Indicator (p. 15)
⑬ Metering Method (p. 95)
⑭ Folder Number – File Number (p. 158)
⑮ Displayed image number / Total number of images
⑯ Shutter Speed (pp. 98, 100), Image Quality (Movies) (p. 116)
⑰ Aperture Value (pp. 99, 100)
⑱ i-Contrast (pp. 104, 145)
⑲ Flash (pp. 75, 106), Flash Exposure Compensation (p. 106)
⑳ Focusing Range (pp. 75, 93)
㉑ File Size (pp. 77, 116)
㉒ Still Images: Recording Pixels (p. 76)
Movies: Movie Length (p. 116)
㉓ Protect (p. 132)
㉔ Favorites (p. 138)
㉕ White Balance Correction (p. 83) / Red-Eye Correction (pp. 105, 146)
㉖ My Colors (p. 85)
㉗ Shooting Date and Time (p. 19)

Handling Precautions

- This camera is a high-precision electronic device. Do not drop it or subject it to strong impacts.
- Never place the camera close to magnets, motors or other devices that generate strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunctions or corrupt image data.
- If water droplets or dirt become stuck on the camera or screen, wipe with a dry soft cloth or eyeglass wiper. Do not rub or apply force.
- Never use cleaners containing organic solvents to wipe the camera or screen.
- Use a commercially available blower brush to remove dust from the lens. For stubborn dirt contact a Canon Customer Support Help Desk as listed on the customer support leaflet supplied with your camera.
- When you move the camera rapidly from cold to hot temperatures, condensation may form on the internal or external surfaces of the camera. To avoid condensation, put the camera in an airtight, resealable plastic bag and let it adjust to temperature changes slowly before removing it from the bag.
- If condensation has formed on the camera, stop using it immediately, as continued use may damage the camera. Remove the battery and memory card, and wait until the moisture has completely evaporated before resuming use.

Functions Available in Each Shooting Mode

Function		C	M	Av	Tv	P	AUTO	
Set Control Ring Func. (p. 103)		*1	○	○	○	○	—	—
Exposure Compensation (p. 74)		*1	—	○	○	○	—	○
Self-Timer (p. 59)	[Self-timer OFF]	*1	○	○	○	○	○	○
	[Self-timer]	*1	○	○	○	○	○	○
Flash (pp. 54, 75, 106)	[Flash A]	*1	—	—	—	○	○	○
	[Flash on]	*1	○	○	○	○	—	—
	[Slow synchro]	*1	—	○	—	○	*3	—
	[Flash off]	*1	○	○	○	○	○	○
Program Shift (p. 96)		*1	—	○	○	○	—	—
AE Lock (p. 96)/FE Lock (p. 96)		*1	—	○	○	○	—	—
AE Lock/Exposure Shift (p. 117)		*1	—	—	—	—	—	—
AF Lock (when registered to the [shortcut] button) (p. 166)		*1	○	○	○	○	—	—
Focusing Range (pp. 75, 93)	[Normal]	*1	○	○	○	○	○	○
	[Macro]	*1	○	○	○	○	—	—
	MF	*1	○	○	○	○	—	○
Face Select (p. 92)		*1	○	○	○	○	○	○
FUNC. Menu								
DR Correction (p. 104)	OFF	*1	○	○	○	○	—	—
	AUTO	*1	—	○	○	○	○	○
	200% 400%	*1	○	○	○	○	—	—
Shadow Correct (p. 105)	OFF	*1	○	○	○	○	—	—
	AUTO	*1	○	○	○	○	○	○
ISO Speed (p. 80)	ISO AUTO	*1	—	○	○	○	○	○
	ISO 80 100 125 160 200 250	*1	○	○	○	○	—	—
	ISO 320 400 500 640 800 1000 1250 1600 2000 2500 3200	*1	○	○	○	○	—	○
	ISO 4000 5000 6400 8000 10000 12800	—	—	—	—	—	—	○
White Balance (p. 82)	AWB	*1	○	○	○	○	○	○
	[Day Light] [Cloudy] [Tungsten] [Fluorescent] [Fluorescent H] [Flash] [Underwater] [Custom]	*1	○	○	○	○	—	○
White Balance Correction (p. 83)		*1	○	○	○	○	—	—
My Colors (p. 85)	OFF	*1	○	○	○	○	○	○
	V N Se BW P L D B G R C	*1	○	○	○	○	—	—
Bracketing (pp. 94, 97)	OFF	*1	○	○	○	○	○	○
	[AEB]	*1	—	○	○	○	—	—
	[Focus-BKT]	*1	○	○	○	○	—	—
Drive Mode (p. 84)	[Single]	*1	○	○	○	○	○	○
	[Continuous] [AF Continuous]	*1	○	○	○	○	—	○
Metering Method (p. 95)	[Evaluative]	*1	○	○	○	○	○	○
	[Center Weighted Avg.] [Spot]	*1	○	○	○	○	—	—
Aspect Ratio (p. 79)		*1	○	○	○	○	○	—
Image Type (p. 78)	JPEG RAW RAW+JPEG	*1	○	○	○	○	—	—
Recording Pixels (p. 76)/Compression Ratio (Image Quality) (p. 76)		*1	○	○	○	○	○	*8
Image Quality (Movie) (p. 116)	1280 640 320	*1	—	—	—	—	—	—

*1 The available settings depend on the registered shooting modes. *2 The number of shots cannot be specified, and the time delay cannot be set to 0 seconds. *3 Not selectable but switches to [Slow synchro] depending on the circumstances. *4 Not selectable, but switches to [Slow synchro] whenever flash fires. *5 White Balance data not recordable. *6 [Flash on] not available.

SCN																					
									HDR												
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	—	—	—	○	○	○	○	○	○	○	○	○	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	—	—	—	○	○	*2	—	○	*2	*2	○	○	○	○	○	*2	*2	*2	*2
○	○	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	—	—	—	—	—
○	○	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	—	○	—	—	—
—	*4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—
○	○	—	—	—	—	○	○	○	○	○	○	○	○	○	○	○	—	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	○	—	○	—	—	—	○	—	—	—	○	○	—	○
○	○	○	—	—	—	○	○	○	○	○	○	○	○	○	○	○	—	—	○	○	○
○	○	○	○	○	○	○	○	○	○	○	—	—	○	○	○	○	—	—	—	—	—

FUNC. Menu																					
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*5	*6	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	○	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—	—
○	○	○	—	—	—	○	○	○	—	○	○	○	○	○	○	○	*7	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	—	—	—	○	○	○	○	○	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	*9	○

*7 . *8 M will appear as the recording pixel setting, and the image will be fixed at 1824 x 1368 pixels. It will be possible to select a compression ratio (image quality) setting. *9 Recording pixel setting 320 not selectable.

○ Selectable, or set automatically. – Not selectable.

Menus

Shooting Menu

Function			C	M	Av	Tv	P	AUTO	
AF Frame (p. 88)	Center		*1	○	○	○	○	—	○
	Face AiAF		*1	○	○	○	○	○	○
	Tracking AF		*1	○	○	○	○	*3	○
AF Frame Size (p. 88)	Normal/Small		*1	○	○	○	○	—	—
Digital Zoom (p. 55)	Standard		*1	○	○	○	○	○	—
	Off		*1	○	○	○	○	○	○
	Digital Tele-converter (1.4x/2.3x)		*1	○	○	○	○	○	—
AF-Point Zoom (p. 91)	On/Off		*1	○	○	○	○	○	○
Servo AF (p. 94)	On/Off		*1	○	○	○	○	*4	○
AF-assist Beam (p. 162)	On/Off		*1	○	○	○	○	○	○
MF-Point Zoom (p. 93)	On/Off		*1	○	○	○	○	—	○
Safety MF (p. 93)	On/Off		*1	○	○	○	○	—	○
Flash Settings (pp. 105, 106, 107, 162, 163)	Flash Mode	Auto	*1	—	○	○	○	○	○
		Manual	*1	○	○	○	—	—	—
	Flash Exp.Comp	-2 to +2	*1	—	○	○	○	—	—
	Flash Output	Minimum/Medium/ Maximum	*1	○	○	○	—	—	—
	Shutter Sync.	1st-curtain/ 2nd-curtain	*1	○	○	○	○	—	—
	Red-Eye Corr.	On/Off	*1	○	○	○	○	○	○
	Red-Eye Lamp	On/Off	*1	○	○	○	○	○	○
	Safety FE	On/Off	*1	—	○	○	○	*5	*5
ISO Auto Settings (p. 81)	Max ISO Speed	400 – 1600	*1	—	○	○	○	—	—
	Rate of Change	Slow/Standard/Fast	*1	—	○	—	○	—	—
Safety Shift (p. 99)	On/Off		*1	—	○	○	—	—	—
Wind Filter (p. 117)	On/Off		*1	—	—	—	—	—	—
Review (p. 163)	Off/2 – 10 sec./Hold		*1	○	○	○	○	○	○
Review Info (p. 164)	Off/Detailed/Focus Check		*1	○	○	○	○	○	○
Blink Detection (p. 111)	On/Off		*1	○	○	○	○	○	○
Custom Display (p. 164)	Shooting Info, Grid Lines		*1	○	○	○	○	○	○
	Histogram		*1	○	○	○	○	*8	*8
IS Mode (p. 165)	Continuous/Off		*1	○	○	○	○	*9	○
	Shoot Only/Panning		*1	○	○	○	○	—	○
Date Stamp (p. 58)	Off/Date/Date & Time		*1	○	○	○	○	○	—
Set Shortcut button (p. 166)			*1	○	○	○	○	○	○
Save Settings (p. 108)			○	○	○	○	○	—	—

*1 The available settings depend on the registered shooting modes. *2 AiAF
*3 Not selectable, but can be enabled with the ▲ button (p. 24). *4 [On] when movement is detected.
*5 Always [On].

SCN																					
O	O	O	—	—	—	O	O	O	—	O	O	—	O	O	O	O	O	O	—	—	—
O	O	O	O	O	O	O	O	O	O	O	—	—	O	O	O	O	—	—	*2	*2	*2
O	O	O	—	—	—	O	O	O	—	O	—	—	O	O	O	O	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
O	O	O	O	O	O	O	O	—	—	—	—	—	O	O	O	O	O	—	O	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	—	—	—	—	—	O	O	O	O	O	—	—	—	—
O	O	—	O	O	O	O	O	O	O	O	—	—	O	O	O	O	—	—	—	—	—
O	O	*5	—	—	—	O	O	O	—	O	—	—	O	O	O	O	—	—	—	—	—
O	O	O	*5	O	O	O	O	O	O	O	O	O	O	O	O	O	—	O	O	O	O
O	O	O	—	—	—	O	O	O	O	O	—	—	O	O	O	O	—	—	—	—	—
O	O	O	—	—	—	O	O	O	O	O	O	O	O	O	O	O	—	—	O	O	O
O	O	O	O	O	O	O	O	O	—	O	O	O	O	O	O	O	—	O	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
O	O	O	O	O	O	O	O	—	—	—	—	—	O	O	O	O	—	—	—	—	—
O	O	O	O	O	O	O	O	O	—	O	O	O	O	O	O	O	—	O	—	—	—
*5	*5	*5	*5	*5	*5	*5	*5	*5	—	*5	*5	*5	*5	*5	*5	*5	—	*5	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	O	—	O
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	—	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	*6	—	—	—
O	O	O	O	O	O	O	O	O	—	O	—	—	O	—	O	O	—	—	—	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	*7	O	O	O
*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	—	—	—
O	O	O	O	O	O	O	O	O	O	—	O	O	O	O	O	O	O	—	—	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

*6 [Off] when flash fires. *7 Only available when [Grid Lines] selected.
*8 Only available when selected in Custom Display. *9 Always [Continuous].

O Selectable, or set automatically. – Not selectable

Set up Menu

Item	Content	Ref. Page
Mute	On/Off*	p. 48
Volume	Set all operation sounds (5 levels).	p. 48
Sound Options	Set the sounds for each camera operation.	p. 156
Hints & Tips	On*/Off	p. 156
LCD Brightness	Set within a range of ±2.	p. 49
Start-up Image	Add an image as a start-up image.	p. 157
Format	Formats memory card, erasing all data	pp. 22, 51
File Numbering	Continuous*/Auto Reset	p. 158
Create Folder	Monthly*/Daily	p. 159
Lens Retract	1 min.*/0 sec.	p. 159
Power Saving	Auto Power Down: On*/Off Display Off: 10, 20 or 30 sec./1*, 2 or 3 min.	pp. 51, 159, 160
Time Zone	Home*/World	p. 160
Date/Time	Date and time settings	p. 20
Distance Units	m/cm* / ft/in	p. 161
Video System	NTSC / PAL	p. 129
Ctrl via HDMI	Enable/Disable*	p. 130
Eye-Fi Settings	Eye-Fi connection settings (only appears when Eye-Fi card is inserted)	p. 171
Language	Choose display language.	p. 21
Reset All	Returns camera to default settings.	p. 50

* Default setting

★ My Menu Menu

Item	Content	Ref. Page
My Menu settings	Sets the items registered to My Menu.	p. 167

▶ Playback Menu

Item	Content	Ref. Page
Smart Shuffle	Starts Smart Shuffle.	p. 127
Slideshow	Plays back images automatically.	p. 125
Erase	Erases images (Select, Select Range, All Images).	p. 136
Protect	Protects images (Select, Select Range, All Images).	p. 132
Rotate	Rotates images.	p. 141
Favorites	Tags or untags images as favorites.	p. 138
My Category	Categorizes images (Select, Select Range).	p. 139
i-Contrast	Corrects dark portions and contrast in still images.	p. 145
Red-Eye Correction	Corrects red eyes in still images.	p. 146
Trimming	Trims portions of still images.	p. 143
Resize	Resizes and saves still images.	p. 142
My Colors	Adjusts colors in still images.	p. 144
Scroll Display	On*/Off	p. 122
Resume	Last seen*/Last shot	p. 168
Transition	Fade*/Scroll/Slide/Off	p. 128

* Default setting

Print Menu

Item	Content	Ref. Page
Print	Displays printing screen (When connected to a printer).	—
Select Images & Qty.	Chooses individual images for printing.	p. 152
Select Range	Chooses starting and ending images for printing.	p. 153
Select All Images	Chooses all images for printing.	p. 153
Clear All Selections	Cancels all settings for printing.	p. 153
Print Settings	Sets the printing style.	p. 151

Specifications

Image Sensor
- Camera Effective Pixels ..... Approx. 10.0 million pixels

Lens
- Focal Length .... 3.8x zoom: 6.0 (W) – 22.5 (T) mm (35mm film equivalent: 28 (W) – 105 (T) mm)
- Focusing Range .... 5 cm (2.0 in.) – infinity (W), 30 cm (12 in.) – infinity (T)
  - Macro: 5 – 50 cm (W), 30 – 50 cm (T) (2.0 in. – 1.6 ft. (W), 12 in. – 1.6 ft. (T))

Image Stabilizer System.......... Lens-shift type

Imaging Processor DIGIC4

LCD Monitor
- Type .... TFT color (wide viewing angle type)
- Size .... 3.0 type
- Effective Pixels.................. Approx. 461,000 dots
- Aspect Ratio....................... 4:3
- Features .... Brightness adjustment (5 levels), Quick-bright LCD

Focus
- Control System................... Autofocus: Single (Continuous in Auto mode), Servo AF (Servo AE)
  Manual Focus
- AF Frame .... Face AiAF, Center, Tracking AF

Metering System .... Evaluative, Center-weighted average, Spot

Exposure Compensation (Still Images) /Exposure Shift (Movies).................................. ±2 stops in 1/3-stop increments

ISO Speed (Standard Output Sensitivity, Recommended Exposure Index) .... Auto, ISO 80/100/125/160/200/250/320/400/500/640/800/1000/1250/1600/2000/2500/3200

White Balance .... Auto, Day Light, Cloudy, Tungsten, Fluorescent, Fluorescent H, Flash, Underwater, Custom

Shutter Speeds........................ 1 – 1/1600 sec.
15 – 1/1600 sec. (Total shutter speed range)

Aperture
- Type .... Iris
- f/number .... f/2.0 – f/8.0 (W), f/4.9 – f/8.0 (T)

Flash
- Modes: .... Auto, On, Slow Synchro, Off
- Range:............................... 50 cm – 6.5 m (W), 90 cm – 3.0 m (T)
  (1.6 – 21 ft. (W), 3.0 – 9.8 ft. (T))

Shooting Mode .... C, M, Av, Tv, P, Auto, Low Light, SCN*1, Movie*2
*1 Portrait, Landscape, Kids&Pets, Smart Shutter*3, Super Vivid, Poster Effect, Color Accent, Color Swap, High Dynamic Range, Nostalgic, Fish-eye Effect, Miniature Effect, Beach, Underwater, Foliage, Snow, Fireworks, Stitch Assist
*2 Standard, Miniature Effect, Color Accent, Color Swap
*3 Smile, Wink Self-timer, Face Self-timer

Digital Zoom	Still images/Movies: Approx. 4.0x (up to approx. 15x in combination with the optical zoom) Safety Zoom, Digital tele-converter
Continuous Shooting	
Mode	Normal, AF, LV
Speed (Normal)	Approx. 1.9 shots/sec. (In P mode) Approx. 3.9 shots/sec. (In Low Light mode)
Number of Shots (Approximate)	
(CIPA compliant)	Approx. 200 shots
Recording Media	SD memory card, SDHC memory card, SDXC memory card MultiMediaCard, MMC*plus* card, HC MMC*plus* card
File Format	Design rule for Camera File system, DPOF (Version 1.1) compliant
Data Type	
Still Images	Exif 2.3 (JPEG), RAW (CR2 (Canon Original))
Movies	MOV (Image data: H.264; Audio data: Linear PCM (stereo))
Recording Pixels	
Still Images	16:9 Large: 3648 x 2048, Medium 1: 2816 x 1584, Medium 2: 1920 x 1080, Small: 640 x 360 3:2 Large: 3648 x 2432, Medium 1: 2816 x 1880, Medium 2: 1600 x 1064, Small: 640 x 424 4:3 Large: 3648 x 2736, Medium 1: 2816 x 2112, Medium 2: 1600 x 1200, Small: 640 x 480, RAW: 3648 x 2736 • Fixed to 1824 x 1368 when in Low Light 1:1 Large: 2736 x 2736, Medium 1: 2112 x 2112, Medium 2: 1200 x 1200, Small: 480 x 480 4:5 Large: 2192 x 2736, Medium 1: 1696 x 2112, Medium 2: 960 x 1200, Small: 384 x 480
Movies	Standard, Color Accent, Color Swap: 1280 x 720 (24 fps*1), 640 x 480 (30 fps*2), 320 x 240 (30 fps*2) Miniature Effect: 1280 x 720 (Shooting: 6 fps/3 fps/1.5 fps, Playback: 30 fps*2), 640 x 480 (Shooting: 6 fps/3 fps/1.5 fps, Playback: 30 fps*2) *1 Actual frame rate is 23.976 fps. *2 Actual frame rate is 29.97 fps.
Interface	Hi-Speed USB HDMI output Analog audio output (stereo) Analog video output (NTSC/PAL)
Direct Print Standard	PictBridge
Power Source	Battery Pack NB-6L AC Adapter Kit ACK-DC40
Dimensions	99.8 x 58.4 x 29.5 mm (3.93 x 2.30 x 1.16 in.) • CIPA compliant
Weight (CIPA compliant)	Approx. 193 g (6.80 oz.) (Including the battery and memory card) Approx. 170 g (6.00 oz.) (camera body only)

Battery Pack NB-6L

Type .... Rechargeable lithium-ion battery
Voltage .... 3.7 V DC
Capacity .... 1000 mAh
Charging cycles......................... Approx. 300 times
Operating temperature .... 0 – 40 °C (32 – 104 °F)
Dimensions............................... 34.4 x 41.8 x 6.9 mm (1.35 x 1.65 x 0.27 in.)
Weight .... Approx. 21 g (0.74 oz.)

Battery Charger CB-2LY/2LYE

Rated input............................... 100 – 240 V AC (50/60 Hz), 0.085 A (100 V) – 0.05 A (240 V)
Rated output............................. 4.2 V DC, 0.7 A
Charge time.............................. Approx. 1 hour 55 min.
Operating temperature .... 0 – 40 °C (32 – 104 °F)
Dimensions............................... 58.6 x 86.4 x 24.1 mm (2.31 x 3.40 x 0.95 in.)
Weight .... Approx. 70 g (2.47 oz.) (CB-2LY)
Approx. 61 g (2.15 oz.) (CB-2LYE) (excluding power cord)

- All data is based on tests by Canon.
- Camera specifications or appearance are subject to change without notice.

Index

Disclaimer

- Reprinting, transmitting, or storing in a retrieval system any part of this guide without the permission of Canon is prohibited.
- Canon reserves the right to change the contents of this guide at any time without prior notice.
- Illustrations and screenshots in this guide may differ slightly from the actual equipment.
- The above items notwithstanding, Canon accepts no liability for damages due to mistaken operation of the products.

CDP-E101-010